TETRA TECH

WORK PLAN – HAZARDOUS SUBSTANCES REMOVAL
Former SoloPower Systems, Inc. Facility
6308-6310 North Marine Drive
Portland, Oregon 97203

9 November 2018

Prepared by:

Tetra Tech, Inc.
17885 Von Karman Avenue, Suite 500
Irvine, California 92614

Prepared for:

LIT Industrial, LP
c/o Environmental Asset Services, Inc. (EASI)
3501 Jamboree Road, Suite 230
Newport Beach, California 92660

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Portland, Oregon 97203
Project No. T24396.036A

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Tetra Tech, Inc.
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Project No. T24396.036A

Prepared for:

LIT Industrial, LP
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3501 Jamboree Road, Suite 230
Newport Beach, California 92660
Attention: Ex. 6 PP / Ex. 7(C)

TETRA TECH

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9 November 2018

LIT Industrial, LP
c/o Environmental Asset Services, Inc. (EASI)
3501 Jamboree Road, Suite 230
Newport Beach, California 92660

Attention: Ex. 6 PP / Ex. 7(C)

SUBJECT: WORK PLAN – HAZARDOUS SUBSTANCES REMOVAL
Former SoloPower Systems, Inc. Facility
6308-6310 North Marine Drive, Portland, Oregon 97203
Project No. T24396.036A

Dear Ex. 6 PP / Ex. 7(C)

Tetra Tech, Inc. (Tetra Tech) appreciates the opportunity to provide this Work Plan to LIT Industrial, LP (LIT) for the above-referenced facility formerly occupied by SoloPower Systems, Inc. (SoloPower facility).

We recognize LIT, as Site Owner, is stepping in to see that this Work Plan is implemented because SoloPower, which has the responsibility for disposal of hazardous substances at the facility, has abdicated its responsibility. We look forward to working with LIT to see that hazardous substances are removed in a timely manner in accordance with applicable regulations, so the vacant facility can be returned to active use.

Please do not hesitate to contact us at your convenience in the event of questions regarding this Work Plan.

Sincerely,

TETRA TECH, INC.

Ex. 6 PP / Ex. 7(C)

Ex. 6 PP / Ex. 7(C)

Enclosure

TABLE OF CONTENTS

ABBREVIATIONS

The following is an alphabetical list of abbreviations used in this Report. Some of the abbreviations are used only in one or more of the accompanying figures or tables and may not be in the body of the Report.

ACGIH	American Conference of Governmental Industrial Hygienists
ASTM	American Society of Testing and Materials
CAD/CDS	cadmium sulfate deposition room
$CdSO_4$	cadmium sulfate
CFR	Code of Federal Regulations
CHI	Clean Harbors, Inc.
CIH	Certified Industrial Hygienist
cm	centimeter
EASI	Environmental Asset Services, Inc.
FACS	Forensic Analytical Consulting Services
Ga	gallium
H_2O_2	hydrogen peroxide
H_2SO_4	sulfuric acid
HASP	health and safety plan
HCl	hydrochloric acid
HVAC	heating, ventilation, and air conditioning
In	indium
InO_3	indium trioxide
LIT	LIT Industrial, LP
MEK	methyl ethyl ketone
mg/m^3	milligram per cubic meter
NaOH	sodium hydroxide
NH_4OH	ammonium hydroxide
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	permissible exposure limit
PLAT	plating room
PPE	personal protective equipment
ppm	parts per million
REL	recommended exposure limit
RL	reporting limit
RTD	removal, transport, and disposal

TIP	Tenant Inspection Program
TLV	threshold limit values
TWA	time weighted average
WWAN/WAN	wastewater neutralization room

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1.0 INTRODUCTION

On behalf of LIT Industrial, LP (LIT) and Clarion Partners, LLC (Clarion), Tetra Tech, Inc. (Tetra Tech) has prepared this Work Plan for Hazardous Substances Removal (Work Plan) for hazardous substances that were left by the former tenant, SoloPower Systems, Inc. (SoloPower), at the Marine Drive Distribution Center I industrial building at 6308-6310 North Marine Drive in Portland, Oregon 97203 (SoloPower facility). LIT is the Site Owner. The location of the SoloPower facility (also referred to as the Site building) is shown in Figure 1. A layout of the SoloPower facility is shown in Figure 2.

The Site building is located in the Port of Portland on the southwest side of North Marine Drive. It is a northwest-southeast elongate, 225,500-square foot Class A, 26-foot clear height industrial building. An active railroad spur is located alongside the southwest side of the Site building. Dock-high loading docks and paved parking and driveways are adjacent to the remaining three sides of the Site building.

The Work Plan has been prepared in accordance with Authorization for Additional Environmental Consulting Services executed on 15 October 2018 and the terms and conditions of the Environmental Consulting Services Agreement dated July 21, 2005, as Amended by the 2nd Amendment dated February 9, 2015 (collectively, the Agreement).

SoloPower was a tenant that occupied the entire Site building commencing in 2012. Prior to vacating the Site building, SoloPower manufactured solar panels. The manufacturing process involved the use of hazardous materials and the generation of hazardous waste (collectively, hazardous substances). SoloPower now has ceased operations at the Site building and vacated the facility leaving behind hazardous substances.

As a part of a Tenant Inspection Program (TIP), administered by Environmental Asset Services, Inc. (EASI) on behalf of LIT and Clarion, Tetra Tech performed annual inspections of SoloPower's hazardous substance storage and handling practices from 2012 through 2018. The TIP inspections' focus was on whether releases of hazardous substances had occurred or could potentially occur that would result in adverse impacts to the Site building and the subsurface.

While the TIP inspections were not environmental audits, in general SoloPower's hazardous substances storage and handling practices appeared to be consistent with good industry practice while SoloPower was operating. However, following SoloPower's vacating of the Site building, hazardous substances were no longer being managed and for a time the air handling system was not operating. This resulted in small, localized areas of chemical encrustation, residue, and staining and discoloration (collectively, residuum). The residuum is primarily in three rooms where chemicals were stored and handled. The cessation of SoloPower's management of hazardous substances and the air handling system shutdown also resulted in a now-removed chemical odor in two of the three rooms, as discussed further below in Section 3). Photographs of the SoloPower facility, including representative photographs of the three types of residuum are included in Appendix A.

The localized areas of residuum were primarily on the floor and some of the chemical containers in the former cadmium sulfate deposition (CAD) room, wastewater neutralization (WWAN) room, and the plating (PLAT) room. These rooms are shown on Figure 2 and are collectively referred to as the impacted rooms. The now-removed chemical odor was noted in the CAD and WWAN rooms during the TIP inspection on July 26, 2018.

To evaluate the significance of the residuum in the impacted rooms, Forensic Analytical Consulting Services (FACS), under subcontract to Tetra Tech, performed two site inspections of the impacted rooms under the direction of a Certified Industrial Hygienist (CIH). The first survey included air monitoring and bulk sampling of the encrusted residuum in the CAD and WWAN rooms. Following the first industrial hygiene survey, the ventilation system in the three rooms was turned on and FACS then performed the second industrial hygiene survey in all three impacted rooms. The second survey included air monitoring, wipe sampling, and bulk sampling. A copy of the FACS *Hazardous Chemicals Sampling* report dated 26 October 2018 is included in Appendix B. This report includes additional photographs of the impacted rooms.

2.0 OBJECTIVES

The objectives of the Work Plan activities are to:

- Remove hazardous substances and their containers from the Site building, and transport and dispose of the hazardous substances and containers off-Site, consistent with applicable regulations so the Site building can be re-leased.
- Document that impacted rooms and adjacent work areas in the Site building have been adequately decontaminated by visual inspection and confirmatory surface wipe and area air sampling with results compared to applicable published exposure limits.

3.0 SITE BUILDING CONDITIONS

3.1 FACILITY LAYOUT

The SoloPower facility includes five areas:

- Offices: A small office area at the central northeast side of the Site building.
- Exterior Enclosures: Fenced enclosures adjacent to the northeast side of the Site building. One enclosure includes a large, liquid nitrogen aboveground storage tank (AST). The other larger enclosure includes exterior components of the Site building's air handling system.
- Warehouse: A warehouse area in the northwest end of the Site building that includes an area of cubicles where warehouse and manufacturing personnel had office space, a boneyard area of unused equipment, and a secured fenced-enclosed area with health and safety equipment, parts, and flammable storage cabinets containing minor quantities of chemicals.
- Manufacturing: A manufacturing area in the southeastern part of the Site building that includes large solar panel manufacturing equipment with large diameter ducting that discharged primarily through the northeast building wall and a secured, fence-enclosed maintenance area.
- Manufacturing Support Rooms: A series of small- to medium-sized rooms and enclosures along the northeast building wall between the offices and the three impacted rooms. These rooms include a laboratory, compressor room, electrical power panel enclosure, boiler room, hot water room, and chilled water area.
- Impacted Rooms: The CAD, WWAN, and PLAT rooms. These rooms are located along the northeast and southeast building walls, southeast of the small- to medium-sized rooms. Dedicated ducting in these three rooms includes one air supply duct and two return air ducts that draw in outside air from, and discharge return air, respectively, through the northeast building wall via an outdoor, secured, fence enclosure. Chiller equipment was also present in this outdoor enclosure.

The locations of the above areas are shown on Figure 2.

3.2 HAZARDOUS SUBSTANCES

Chemical storage at the SoloPower facility in August and September 2018, when Work Plan-related activities performed to date took place, was generally consistent with that observed during the TIP inspections. However, the quantities appeared to be substantially reduced relative to those observed when the SoloPower facility was active. An approximate inventory of hazardous substances that remain at the SoloPower facility is provided in Table 1. This inventory is based on Tetra Tech's and FACS's observations in September 2018. Tables 2 and 3 list hazardous materials and hazardous waste, respectively, from Tetra Tech's 2016 TIP report. The hazardous substances listed on Tables 2 and 3 are representative of those that should be considered for any waste profiling during removal of hazardous substances and equipment from the Site.

The hazardous substances, which included, both hazardous materials and hazardous wastes, observed in August and September 2008 were stored primarily in 275-gallon totes, 30- to 55-gallon metal and non-metal drums, and small ASTs in the CAD, WWAN, and PLAT rooms. Based on observations of hazardous substance container labels, the primary chemical compounds of concern that may be encountered during hazardous substances removal in these three rooms are:

CAD Room:
Hazardous Materials: Thiourea powder, cadmium sulfate ($CdSO_4$), ammonium hydroxide (NH_4OH), sulfuric acid (H_2SO_4), hydrochloric acid (HCl), caustic soda, sodium hypochlorite, thiourea/nicad sulfate mix.
Hazardous Waste: Waste indium.

WWAN Room:
Hazardous Materials: Copper (Cu) solution, copper sulfate ($CuSO_4$), hydraulic oil, liquid caustic soda, H_2SO_4, ammonia solution, Thio-Red (polycarbonate), indium trioxide (InO_3), $CuSO_4$, H_2SO_4 solution, acetone, and acid neutralizer.
Hazardous Waste: Waste ammonia solution and selenium wastewater.

PLAT Room:
Hazardous Materials: Sodium hydroxide (NaOH), sodium gallate, indium solution, hydrogen peroxide (H_2O_2), selenious-sodium selenite solution, selenium (Se), H_2SO_4, InO_3, muriatic acid, gallium (Ga), and plating solution.
Hazardous Waste: Waste Ga, In, and Se.

As shown on Table 1, additional chemical storage was also observed in the rooms along the northeast wall of the Site building (the additional manufacturing rooms), the former manufacturing area, the former warehouse area, and the external enclosures of the Site building. It is unknown to what extent the solar panel manufacturing equipment in the impacted rooms and manufacturing area contains hazardous substances.

3.3 INDOOR AIR

The inactivity in the Site building since SoloPower ceased operations and the air handling system being turned off for a time, resulted in a pronounced odor in the CAD and WWAN room. Prior to the air handling system being turned on, the airborne sulfur dioxide concentrations on 15 August 2018 in the CAD and WWAN rooms varied from not detected (0 parts per million [ppm]) to 3.74 ppm, with most results below 1.0 ppm. The maximum detected airborne sulfur dioxide concentration was below the Occupational Health and Safety Administration Permissible Exposure Limit (OSHA PEL) of 5 ppm (expressed as an 8-hour time weighted average [TWA]) but above the National Institute for Occupational Safety and Health recommended exposure limit (NIOSH REL) of 2 ppm (expressed as a 10-hour TWA) and the 2018 American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), which lists a 15-minute Short Term Exposure Limit (STEL) for sulfur dioxide of 0.25 ppm. Ammonia gas was also detected in the CAD and WWAN rooms at concentrations varying from 3.6 ppm to 5.5 ppm, which is well below the PEL of 50 ppm and the lowest published exposure level (REL/TLV) of 25 ppm. None of the other measured airborne chemicals (benzene, ethylbenzene, toluene, methyl ethyl ketone [MEK], nitrous oxide, or chlorine) even approached the applicable OSHA standards or NIOSH and ACGIH recommended exposure levels.; in fact, none of these gases and vapors were detected except in one location (CAD room near east entrance to WWAN room). After the air handling system was turned on, the airborne sulfur dioxide concentrations on 18 September 2018 in the cadmium sulfate and wastewater neutralization rooms were all less than 0.4 ppm and the hydrochloric acid and sulfuric acid concentrations were below the laboratory's reporting limit (RL) of 0.2 mg/m^3 for each acid.

3.4 RESIDUUM

As discussed in Section 1, observed conditions within the Site building since SoloPower ceased operations included small, localized areas of chemical encrustation, residue, staining and discoloration (residuum), primarily across the floor in the CAD, WWAN, and PLAT rooms. Some of the localized impacted areas were

on storage containers and equipment. As shown in the photographs in Appendix A, the localized areas are generally a few inches across with a few areas up to approximately 10 square feet in size. The impacted areas are shown in Figure 3.

The three types of residuum have the following characteristics (based on descriptions by FACS):

- Encrustation: A 3-dimensional, white, crystallization or deposition, that if contacted with hand-pressure, would crumble into loose particulate. This was observed at various locations across the three impacted rooms. The observed encrusted residuum generally measured 1 to 2 square inches in surface area. One area of the floor in the CAD room had a thin layer of encrustation on the floor with an approximate surface area of 10 square feet.

- Residue: A 3-dimensional liquid/lustrous deposit on the concrete floor, which is oily textured and wet to the touch. If contacted (such as stepped on or touched with a gloved hand) this residue can be tracked or spread. This deposit was observed at a limited number of locations in the WWAN and PLAT rooms. The observed areas were primarily narrow in width (up to approximately 1 inch wide), linear (up to approximately 4- to 5-feet long beneath where a tote was previously present), and less than ¼ inch high.

- Staining and Discoloration: Staining is a 2-dimensional, orange brown to reddish brown coloration, primarily on the concrete floor that is dry to the touch. If contacted (such as stepped on or touched with a gloved hand) it is unlikely to be tracked or spread. It was not removed during wipe sampling and is not expected to be removed when wetted with water. Discoloration was generally dark-colored coloration on the floor that was removable during wipe sampling and is expected to be removed if wetted with water. The observed stained and discolored areas were generally on the order of less than a few inches on a side (less than 1 square foot) up to a few areas that were 1 to 2 feet on a side (up to approximately 10 square feet).

Cadmium was detected in all of the August 2018 bulk samples collected from chemical deposits in the CAD and WWAN rooms. The cadmium concentrations varied from 0.54 milligrams per kilogram (mg/kg) to 2,300 mg/kg. The highest concentrations of cadmium were in samples collected in the WWAN room (filter wash station drain and drain pump catch basin) and the CAD room (gas scrubber intake duct). Additional bulk sampling conducted in September 2018 also detected cadmium in the CAD room acid scrubber exhaust ducting (8.4 mg/kg) and in the WWAN room acid storage tank catch basin (360 mg/kg). Cadmium was also detected in surface wipe samples in the WWAN and CAD rooms in concentrations ranging from 6.5 micrograms per 100 square centimeters (µg/100 cm^2) to 40 µg/100 cm^2. These findings indicate that cadmium-containing residuum is present throughout the impacted rooms.

Cadmium is a highly toxic heavy metal with the lowest established OSHA PEL of five (5) micrograms per cubic meter of air (µg/m^3), expressed as an 8-hour time-weighted average. Disturbance of this deposited material could render it airborne, resulting in a potential inhalation exposure pathway for occupants. OSHA requires that all work surfaces are "maintained as free as practicable of accumulations of cadmium". Facility and equipment decontamination is required to remove the cadmium exposure hazard.

Additional bulk and surface wipe samples were collected and submitted for analysis of selenium, indium and gallium, based on containers' product labels for these hazardous substances. Selenium was detected in a bulk sample in the WWAN room hazardous waste vacuum cleaner at a concentration of 68 mg/kg. Surface wipe samples showed selenium concentrations varying form 430 mg/kg to 1,000 mg/kg on CAD and WWAN room surfaces. Indium was detected in surface wipe samples in the WWAN and PLAT

rooms at levels varying from 10 µg/100 cm^2 to 180 µg/100 cm^2; gallium was detected in two locations in the PLAT room at concentrations of 10 µg/100 $cm^2$and 23 µg/100 cm^2. These chemical substances also pose a risk of injury to the respiratory tract. OSHA has established a PEL for selenium of 0.2 milligrams per cubic meter of air (mg/m^3), and NIOSH and the ACGIH have set recommended exposure levels for indium and gallium of 0.1 $mg/m^3$and 0.0003 mg/m^3, respectively.

4.0 HEALTH AND SAFETY PLAN

Activities performed to date have been performed by FACS and Tetra Tech under their respective health and safety plans (HASPs). A copy of Tetra Tech's HASP is included in Appendix C. The FACS inspector who performed the airborne, wipe, and bulk sampling in the impacted rooms did so in the personal protection equipment (PPE) described in the FACS *Hazardous Chemicals Sampling Report* in Appendix B.

All Work Plan-related activities that remain to be performed are to be carried out by the contractors in accordance with their company's HASPs and medical surveillance programs, utilizing the appropriate PPE consistent with applicable OSHA regulations, such as those in the Code of Federal Regulations (CFR) Title 29 Parts1910 and 1926. Daily health and safety meetings will be held and documented by Tetra Tech while hazardous substances are removed.

It is anticipated that the removal of hazardous substances in the three impacted rooms will be carried out in Level C PPE, as a minimum. Once the residuum is removed, it is anticipated that modified Level D PPE can be used in these rooms and elsewhere in the Site building during hazardous substances and manufacturing equipment removal.

Once the hazardous substances (including residuum) and their containers are removed from the three impacted rooms and confirmation air and wipe sampling have been performed, it is expected that the hazards associated with hazardous substances will have been removed to the extent that the Site building can be entered by the public without PPE. However, the Site Owner may, at its discretion, elect to require some types of PPE for those who enter areas of the Site building other than the office area.

During manufacturing equipment removal, it will be the responsibility of those who remove manufacturing equipment to ascertain whether the equipment contains hazardous substances and, if so, to remove the equipment and any hazardous substances from the Site in accordance with appropriate health and safety precautions and in accordance with all applicable regulations (including those for transport and disposal [if any]).

5.0 REMAINING WORK PLAN ACTIVITIES

The remaining activities to be performed under this Work Plan include the following tasks:

1. **Remove Hazardous Substances and Their Containers from the Impacted Rooms**.
   a. Removal: Remove hazardous substances (including residuum) along with their containers from the CAD, WWAN, and PLAT rooms. Removal will be by a qualified and experienced hazardous material removal, transport, and disposal (RTD) contractor, Clean Harbors, Inc. (CHI). This task includes cleaning the floors and other surfaces as needed so that these rooms can be entered without PPE.
   b. Confirmation Air and Wipe Sampling: Perform focused pre- and post-cleaning air and wipe sampling and analysis in the CAD, WWAN, and PLAT rooms. Establish air and surface clearance criteria for the RTD contractor to meet in order to attest to the cleanliness of the facility and specific rooms.
   c. Impacted Rooms' Clearance Letter Report: Prepare a brief letter report to document that hazardous substances have been removed from the CAD, WWAN, and PLAT rooms.

2. **Remove Hazardous Substances from Remaining SoloPower Facility Areas.**
   a. Engagement of RTD Contractor.
   b. Removal: Remove hazardous substances and their containers from the manufacturing, warehouse, and manufacturing support rooms' areas of the Site building.
   c. Removal Documentation Letter Report: Prepare a brief letter report that includes photographic documentation that hazardous substances have been removed from the entire Site building.

3. **Manufacturing Equipment Disposition**.
   a. Site Walk with Prospective Bidders and Equipment Removal Contractors
   b. Manufacturing Equipment Removal
   c. Photographic Documentation of Manufacturing Equipment Removal

4. **Clearance Documentation**.
   a. Site Building Clearance Report: Preparation of a report documenting that Tasks 1 through 3 have been completed and that the Work Plan objective has been met.

Each of the remaining Work Plan tasks are discussed further in Section 6.

6.0 HAZARDOUS SUBSTANCES AND EQUIPMENT REMOVAL

Hazardous substances removal activities will be managed or monitored by Tetra Tech on behalf of LIT except where noted otherwise.

6.1 HAZARDOUS SUBSTANCE REMOVAL - IMPACTED ROOMS

This task is expected to include the following activities:

- RTD Contractor Engagement. This task includes obtaining a quote from CHI, or similarly qualified contractor to cleanup and remove residuum, and hazardous substances and their containers from the three impacted rooms (the Impacted Room Cleanup). Following review and acceptance of the quote, a subcontractor's agreement will be executed. At the time of Work Plan preparation, this activity is underway.

- Agency Notification. The Oregon Department of Environmental Quality (ODEQ) and City of Portland Bureau of Environmental Services Industrial Permitting Section (City) will be notified by EASI or Tetra Tech of the start date of the Impacted Room Cleanup in the three impacted rooms.

- Impacted Rooms Cleanup. This activity is expected to include the following:
  - *Daily Health and Safety Meeting*, including review of Tetra Tech's HASP. CHI will implement its own HASP during this activity.
  - *Impacted Room Cleanup* in the CAD, WWAN, and PLAT rooms is expected to be completed in two to three days. Tetra Tech will monitor this activity. The cleanup is expected to include removal of the residual encrustation such as by scraping, neutralization, and/or wiping with wiping materials such as cleaning wipes and towels that may be moistened with water or solutions selected by CHI. Residue will be removed with wiping materials or other applicable CHI-selected cleaning method. Stained and discolored areas are expected to be cleaned, to the extent feasible with moistened wiping materials or other applicable CHI-selected cleaning method. Wiping materials, residuum, hazardous substances, and hazardous substances' containers will be transported from the SoloPower facility by CHI in accordance with applicable regulations and disposed of at one or more disposal facilities licensed to accept the wastes. EASI or other Site Owner-designated representative will sign the waste disposal manifests.
  - *Confirmation Wipe Sampling and Analysis* will be performed to document that building surfaces in the CAD, WWAN, and PLAT rooms meet applicable regulatory standards (cleanup standards are discussed below in Section 7). Wipe sampling will be performed under the direction of a Tetra Tech or FACS CIH, at locations that include those sampled by FACS prior to cleanup, using procedures Ghost™ Wipes for metals or similar, wetted with deionized water or other applicable wetting agent in accordance with the current version of American Society of Testing and Materials (ASTM) Method D 6966-03 [ASTM 2002]. Each wipe sample will be collected within a taped down disposable paper template with a 10-centimeter by 10-centimeter square opening. Following sampling each wipe will be placed in a laboratory-approved sealable container for transport to the laboratory using chain of custody procedures, including a chain-of-custody form. Analyses will include those performed by FACS during the two hazardous substances surveys and may include additional

analyses at the discretion of Tetra Tech and EASI on behalf of the Site Owner. The analyses are expected to be performed on rush, 24-hour turnaround basis.

- Impacted Rooms Clearance Letter Report. This brief letter report will document that residuum, hazardous substances, and hazardous substances' containers have been removed from the CAD, WWAN, and PLAT rooms and that these three rooms can be entered without Level C PPE. The letter report is expected to include a brief description of the removal, transport, and disposal activities; results of confirmation wipe sampling and analysis; wipe sampling procedures; and photographs of the three rooms following the removal activities. Since this interim clearance document will be time sensitive, it is expected that completed waste disposal manifests will not be included in this report; they will be included in the Site Building Clearance Report, following their receipt.

6.2 HAZARDOUS SUBSTANCES REMOVAL - REMAINING AREAS

This task is expected to include the following activities:

- RTD Contractor Engagement. EASI, on behalf of the Site Owner, expects to request bids from three contractors, perform a Site walkthrough with the three contractors, and engage one of the contractors to remove hazardous substances and their containers along with manufacturing-related ductwork from the remaining areas of the Site building: manufacturing area, manufacturing support rooms, warehouse area, and exterior enclosures.
- Agency Notification. The ODEQ and City will be notified by either EASI or Tetra Tech of the start date of the hazardous substances and their containers' removal from the above-referenced three remaining areas of the Site building.
- Hazardous Substances and Their Containers Removal. This activity will be performed by the RTD Contractor in accordance with its health and safety procedures. The removal activity is expected to be completed in one to two days. Tetra Tech will monitor removal activity at the Site building. Hazardous substances and their containers will be removed and transported from the Site building by the RTD Contractor in accordance with applicable regulations and disposed of at one or more disposal facilities licensed to accept the wastes. EASI or other Site Owner-designated representative will sign the waste disposal manifests.

- Manufacturing-Related Ductwork Removal. Ductwork connected to the manufacturing equipment, including ductwork in the CAD, WWAN, and PLAT rooms, will be inspected for dust that could contain hazardous substances. Access to the ductwork will be provided by the RTD Contractor. Inspection will be performed under the direction of a Tetra Tech or FACS CIH. Observed dust will be sampled and analyzed for hazardous substances consistent with the source of air flow through the ductwork. The analyses are expected to be performed on rush, 24-hour turnaround basis. Ductwork without dust and ductwork that contains dust with no detected hazardous substances will be removed and disposed of or recycled as construction waste by the RTD Contractor. Ductwork with dust that contains hazardous substances will either be cleaned and disposed of as construction waste or disposed of as a hazardous waste in accordance with applicable regulations at a disposal facility licensed to accept the hazardous waste. Decisions on whether to clean any ductwork with hazardous substance-containing dust and whether post-cleaning wipe sampling needs to be conducted will be made by EASI.

- Additional Hazardous Substances Removal Documentation Letter Report. This brief letter report will document that hazardous substances and their containers along with manufacturing-related ductwork have been removed from the manufacturing area, manufacturing support rooms, warehouse area, and exterior enclosures. The letter report is expected to include a brief description of the removal, transport, and disposal activities and photographs of the manufacturing area, manufacturing support rooms, warehouse area, and exterior enclosures following the removal activities. Due to the typical length of time before the completed disposal facility-signed manifests are received, it is expected that completed waste disposal manifests will not be included in this report; they will be included in the Site Building Clearance Report, following their receipt.

6.3 MANUFACTURING EQUIPMENT DISPOSITION

This task is expected to include the following activities:

- Site Walk with Prospective Bidders and Disposal Contractors. EASI, on behalf of the Site Owner, expects to conduct a walkthrough of the Site building with prospective bidders interested in acquiring solar power manufacturing equipment (Bidders). Equipment removal and disposal contractors (Disposal Contractors) will also be invited to attend the walkthrough to provide quotes for the removal and disposal or recycling of manufacturing equipment that is not sold or otherwise conveyed to one or more of the Bidders. Manufacturing equipment will be transferred as is. It will be the responsibility of the Bidders and/or Disposal Contractors to remove, transport and use, dispose, or recycle manufacturing equipment in accordance with all applicable regulations.

- Manufacturing Equipment Disposition: This activity will be performed by Bidders and/or Disposal Contractor in accordance with their respective health and safety procedures. The removal activity duration is unknown at this time but is not expected to exceed two weeks. Tetra Tech will monitor removal activities at the Site building to document that no release of hazardous substances occurs during manufacturing equipment removal (and monitor hazardous substance cleanup in the event there is an accidental release at the Site).

- Photographic Documentation of Manufacturing Equipment Removal: Tetra Tech will provide "before" and "after" photographs of areas where manufacturing equipment was present. These photographs will be included in the Site Building Clearance Report (discussed below in Section 6.4).

6.4 CLEARANCE DOCUMENTATION

This task will involve preparation of the Site Building Clearance Report (Clearance Report). This report will document the activities described above in Sections 6.1 to 6.3 have been completed and that the Work Plan objective has been met. The Clearance Report is expected to include:

- A summary of the activities described above in Sections 6.1 to 6.3.
- A statement that the Work Plan objective has been met.
- Site location and building figures.
- Photographs of the Site building's conditions at the conclusion of manufacturing equipment removal activities.

- Copies of the following reports in appendices: Impacted Rooms Clearance Letter Report (including laboratory reports) and Additional Hazardous Substances Removal Documentation Letter Report.
- Completed waste disposal manifests.

7.0 CLEANUP STANDARDS

Site cleanup in the three impacted rooms is expected to take place until:

- There is no visible encrustation or residue.
- Staining and discoloration that is readily removable by CHI has been removed.
- There is no detectable hazardous substance in confirmation wipe samples. The laboratory's RLs will be consistent with those cited in the FACS report that is included in Appendix B.
- Post-remediation airborne cadmium concentrations in all work areas are at or below 2 $\mu g/m^3$, which is just below the OSHA action level.

8.0 LIMITATIONS AND RELIANCE

Tetra Tech warrants that the services provided to LIT have been prepared, performed and rendered in accordance with procedures, practices, and standards generally accepted and customary in the consultant's profession for use in similar assignments. Our professional services have been performed in accordance with customary principles and practices in the fields of environmental science and engineering and the scope of work that was authorized by the LIT. This warranty is in lieu of all other warranties either expressed or implied. Tetra Tech is not responsible for the independent conclusions, opinions or recommendations made by others based on the records review, site inspection, field exploration, and laboratory test data presented in this Work Plan.

It must be recognized that all surficial environmental assessments are inherently limited in the sense that conclusions are drawn from information obtained from limited Site investigation. Subsurface conditions were not field investigated as part of this Work Plan and may differ from the conditions implied by the surficial observations. Additionally, the passage of time may result in a change in the environmental characteristics at this Site. This Work Plan does not warrant against future operations or conditions, nor does this warrant operations or conditions present of a type or at a location not investigated. This Work Plan is not a regulatory compliance audit.

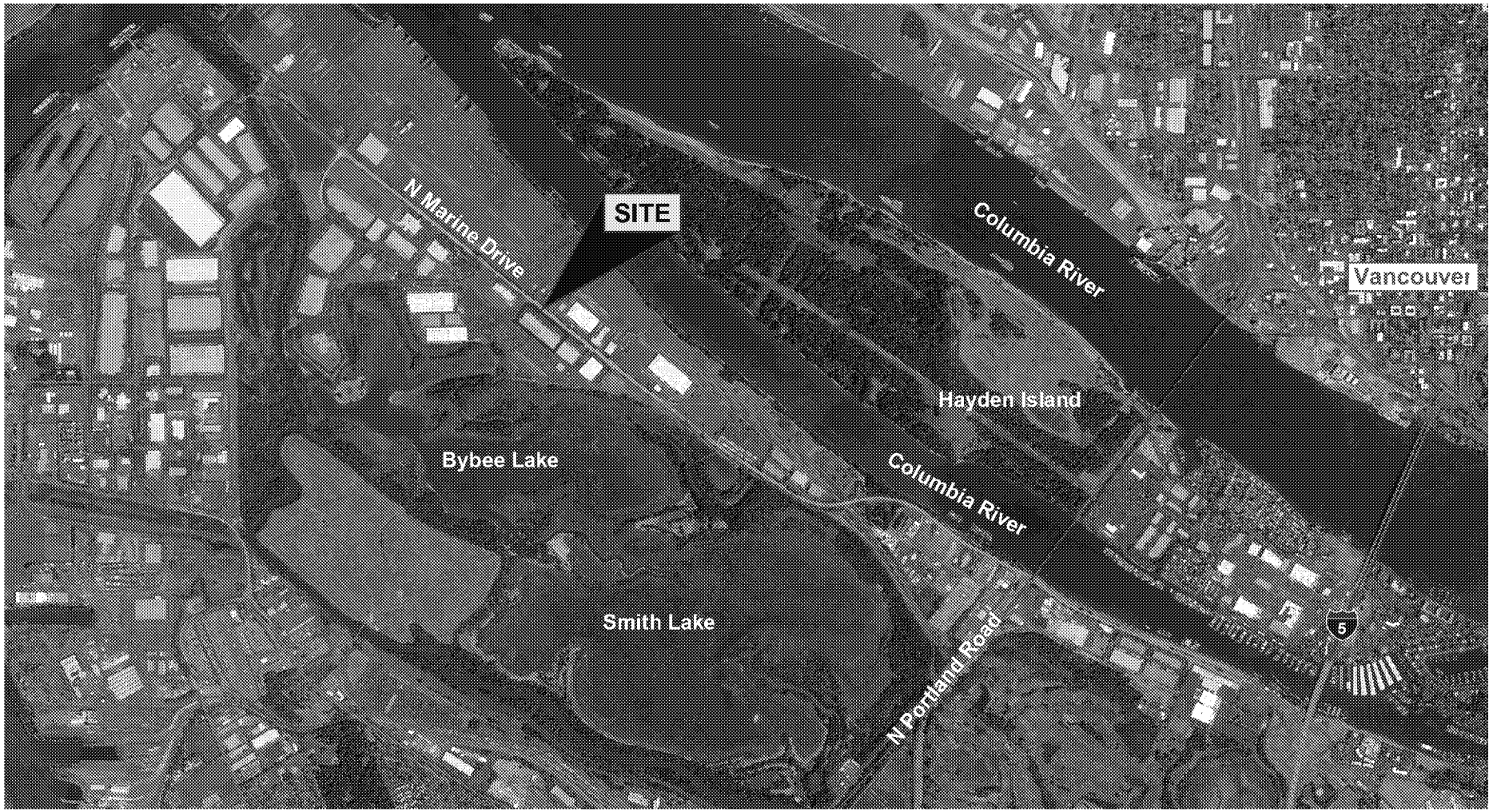
This Work Plan is not intended to assess if any soil contamination, waste emplacement, or groundwater contamination exists by subsurface sampling through the completion of soil borings and the installation of monitoring wells. The scope of work, authorized by the client, did not include these activities.

Certain information contained in this Work Plan may have been rightfully provided to Tetra Tech by third parties or other outside sources. When provided, Tetra Tech has made reasonable inquiry into the accuracy of such information; however, Tetra Tech does not make any warranties or representations, either explicit or implied, regarding the accuracy of such information, and shall not be held accountable or responsible in the event that any such inaccuracies are present.

This Work Plan is for the exclusive use of LIT, Clarion Partners, LLC, and EASI. There is to be no third-party use or reliance on this Work Plan without the written authorization of Tetra Tech. Any authorized third-party use of this Work Plan shall also be subject to the terms and conditions governing the work in the Agreement between the LIT and Tetra Tech, and shall be limited by the exceptions and limitations in this Work Plan, and with the acknowledgment that actual Site conditions may change with time, and that hidden conditions may exist at the property that were not discoverable within the authorized scope of the Work Plan. Any unauthorized release or misuse of this Work Plan shall be without risk or liability to Tetra Tech.

FIGURES

Figure 1 – Site Location Map
Figure 2 – Site Map
Figure 3 – Impacted Rooms Map



LEGEND

SITE BOUNDARY

0 3,000 6,000

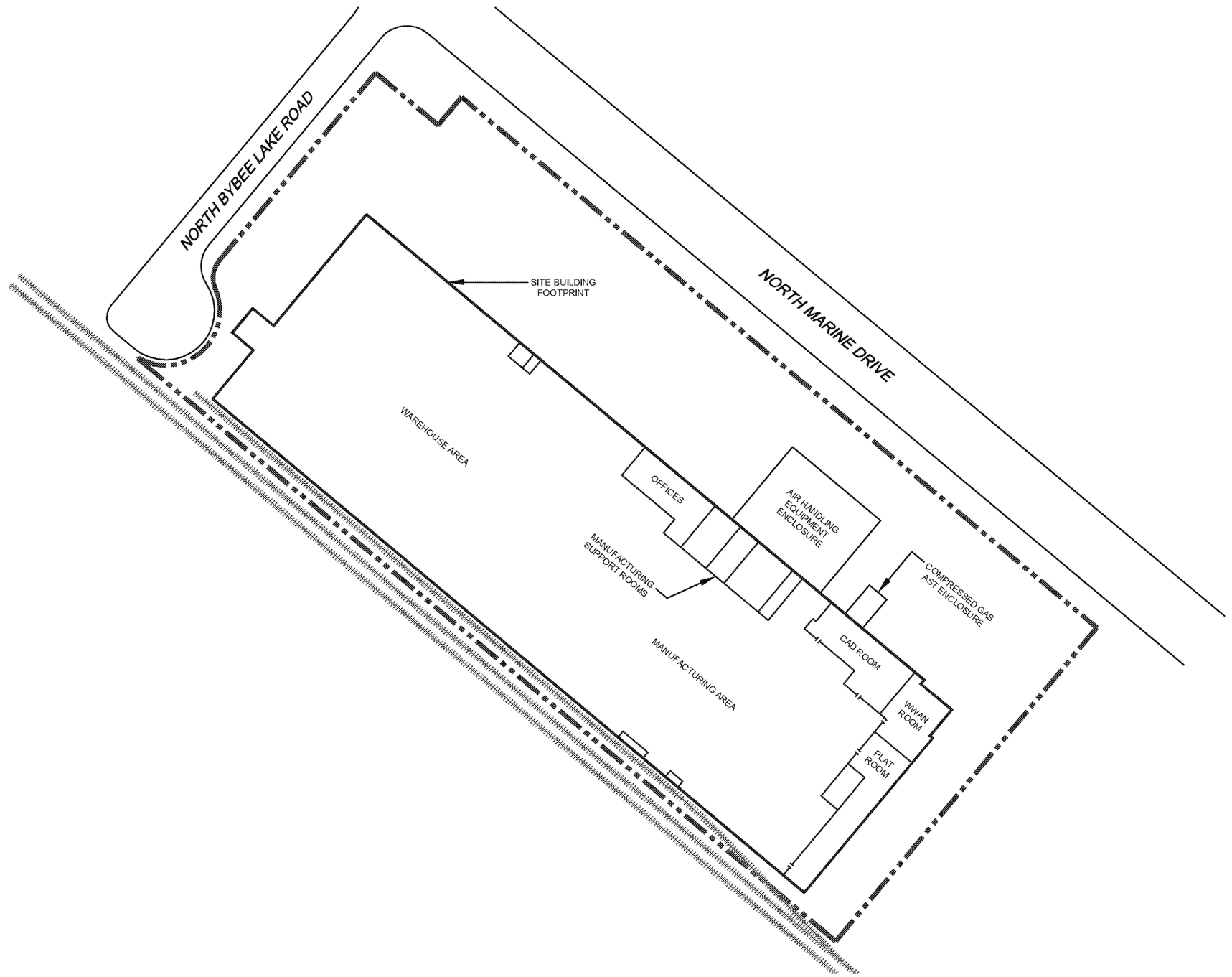
SCALE (FEET)

N

SOURCE:

2018 AERIAL PHOTOGRAPH (GOOGLE EARTH PRO)

MARINE DRIVE DISTRIBUTION CENTER I FORMER SOLOPOWER, INC. FACILITY 6308 NORTH MARINE DRIVE PORTLAND, OREGON 97203	TETRA TECH NOVEMBER 9, 2018 TETRA TECH PROJ. NO. T24396.36A	SITE LOCATION MAP FIGURE 1



LEGEND

	SITE BOUNDARY
AST	ABOVEGROUND STORAGE TANK
CAD ROOM	CADMIUM SULFATE DEPOSITION ROOM
PLAT ROOM	PLATING ROOM
WWAN ROOM	WASTEWATER NEUTRALIZATION ROOM
	RAILROAD TRACK OR RAILROAD SPUR TRACK

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. BASE MAP AND SITE BOUNDARIES DERIVED FROM MULTNOMAH COUNTY ASSESSOR'S MAP AND 2017 AERIAL PHOTOGRAPH.
3. BUILDING INTERIOR LAYOUT DERIVED FROM 2012 SCHEMATIC OBTAINED FROM SOLOPOWER.

0 120 240

SCALE (FEET)

MARINE DRIVE DISTRIBUTION CENTER I
FORMER SOLOPOWER, INC. FACILITY
6308 NORTH MARINE DRIVE
PORTLAND, OREGON 97203

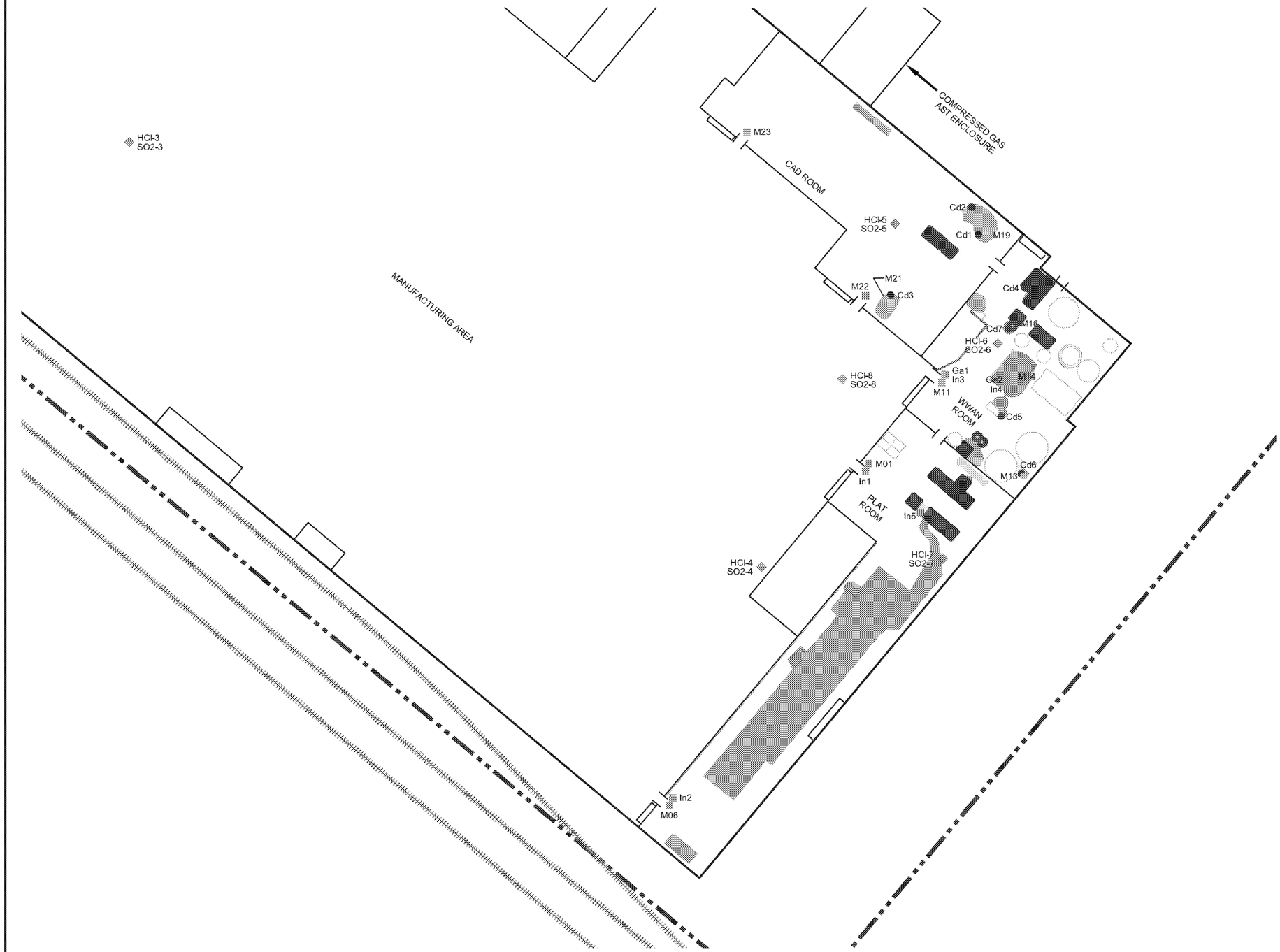
TETRA TECH

NOVEMBER 9, 2018

TETRA TECH PROJ. NO. T24396.036A

SITE MAP

FIGURE 2



LEGEND

	SITE BOUNDARY
AST	ABOVEGROUND STORAGE TANK
CAD ROOM	CADMIUM SULFATE DEPOSITION ROOM
PLAT ROOM	PLATING ROOM
WWAN ROOM	WASTEWATER NEUTRALIZATION ROOM
Cd3	BULK SAMPLE COLLECTED 8/17/2018 AND ANALYZED FOR CADMIUM
HCl-1 SO2-1	AIR SAMPLE COLLECTED 9/18/2018 AND ANALYZED FOR HYDROCHLORIC ACID, SULFURIC ACID, SULFUR DIOXIDE, AND PARTICULATE SULFATE
M16	BULK SAMPLE COLLECTED 9/19/2018 AND ANALYZED FOR CADMIUM AND SELENIUM
M14	WIPE SAMPLE COLLECTED 9/19/2018 AND ANALYZED FOR CADMIUM AND SELENIUM
Ga1 In3	WIPE SAMPLE COLLECTED 9/21/2018 AND ANALYZED FOR GALLIUM AND INDIUM
	VISIBLE ENCRUSTATION OBSERVED ON THE CONCRETE FLOOR, ITEMS, OR EQUIPMENT
	VISIBLE RESIDUE OBSERVED ON THE CONCRETE FLOOR, ITEMS, OR EQUIPMENT
	VISIBLE STAINS/DISCOLORATION OBSERVED ON THE CONCRETE FLOOR OR EQUIPMENT
	ROLL-UP DOOR
	PERSON DOOR
	RAILROAD TRACK OR RAILROAD SPUR TRACK

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. BASE MAP AND SITE BOUNDARIES DERIVED FROM MULTNOMAH COUNTY ASSESSOR'S MAP AND 2017 AERIAL PHOTOGRAPH.
3. BUILDING INTERIOR LAYOUT DERIVED FROM 2012 SCHEMATIC OBTAINED FROM SOLOPOWER.
4. ENCRUSTATION, RESIDUE, AND STAINS/DISCOLORATION ARE LOCALIZED AREAS WITHIN THE PURPLE, BLUE, AND TAN SHADED AREAS, RESPECTIVELY.

MARINE DRIVE DISTRIBUTION CENTER I
FORMER SOLOPOWER, INC. FACILITY
6308 NORTH MARINE DRIVE
PORTLAND, OREGON 97203

OCTOBER 9, 2018

TETRA TECH PROJ. NO. T24396.036A

IMPACTED ROOMS MAP

FIGURE 3

TABLES

Table 1-1C – Hazardous Substances Inventory

Table 2 – TIP-Reported Hazardous Materials in 2016

Table 3 – TIP-Reported Hazardous Wastes in 2016

TABLE 1. HAZARDOUS SUBSTANCES INVENTORY - SEPTEMBER 2018

Chemical	TOAL Quantity	Units	AST	Solvent & Thinner	Paint & Ink	Oil & Lubricant	Antifreeze	Diesel	Heavy Metal	Liquid Plastics	Non-Flammable Gas	Acids	Bases	Other Flammable	Other Corrosive	Other Toxic	Liquid Haz Waste*	Solid Haz Waste
3M Tape Primer 94	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone & Thinner	5	gallons		5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium Hydroxide	1,150	gallons		-	-	-	-	-	-	-	-	-	1,050	-	-	-	100	-
AQ-Press Low VOC AQMD Compliant Spray and Wipe Press Wash	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Argon	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Citranox & Liquinox	2	gallons		-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
Conductive Ink	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium Sulfate Powder & Cd Debris	2,600	pounds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,600
Cadmium Sulfate Waste Solution (Including Cd-Se Waste Soln.)	1,330	gallons		-	-	-	-	-	-	-	-	-	-	-	170	-	1,160	-
Copper Solution	560	gallons		-	-	-	-	-	-	-	-	-	-	-	-	-	560	-
Plating Baths	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Di-Ionized Water	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrochloric Acid 28%	115	gallons		-	-	-	-	-	-	-	-	115	-	-	-	-	-	-
Hydrogen Peroxide (H_2O_2)	30	gallons		-	-	-	-	-	-	-	-	30	-	-	-	-	-	-
Hydrogen Sulfide	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indium Trichloride (Corrosive) & Indium Waste Solutions	1,055	gallons		-	-	-	-	-	-	-	-	-	-	-	1,050	-	5	-
Ion Exchange Resins	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl Alcohol	12	gallons		12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metal Targets	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen (liquid, cryogenic)	6,500	gallons		-	-	-	-	-	-	-	6,500	-	-	-	-	-	-	-
Non-Conductive Ink	6	gallons		-	6	-	-	-	-	-	-	-	-	-	-	-	-	-
Oils, Lubricants, Greases, Adhesives, Paints, Patching Compounds	213	gal. & lbs		-	-	203	-	-	-	-	-	-	-	-	-	-	-	10
Other Corrosives	1,135	gallons		-	-	-	-	-	-	-	-	5	-	-	1,130	-	-	-
Paint	17	gallons		-	17	-	-	-	-	-	-	-	-	-	-	-	-	-
Printer Ink Black	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Printer Ink White	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene Glycol n-Propyl Ether	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PV7010 A & B Pottant	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenious Acid (diluted)	55	gallons		-	-	-	-	-	-	-	-	55	-	-	-	-	-	-
Sodium Hydroxide 25% to 50% (WWT)	330	gallons		-	-	-	-	-	-	-	-	-	330	-	-	-	-	-
Sodium Hypochlorite (NaClO) (21.5%)	30	gallons		-	-	-	-	-	-	-	-	-	30	-	-	-	-	-
Sodium Salts	1,800	pounds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,800
Solid Selenium	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfuric Acid 30% (WWT)	550	gallons		-	-	-	-	-	-	-	-	550	-	-	-	-	-	-
Thio-Red (Na2CS3++)[Sulfide polymer (metal precipitant)(liquid)]	130	gallons		-	-	-	-	-	-	-	-	-	-	-	-	-	130	-
Thiourea (CH_4N_2S) Powder (Photographic fixative)	1,450	pounds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,450
Coolant	11	gallons		-	-	-	11	-	-	-	-	-	-	-	-	-	-	-
Diesel	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetylene for Lab AA	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Chlorinated Solvents	250	gallons		250	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contaminated Cleaning Debris	-			-	-	-	=	-	=	-	=	-	-	-	-	-	-	-
Solid Haz. Waste	210	bs & drums			-	-	-	-	-	-	-	-	-	-	-	-	-	210
TOTAL			-	267	23	203	11	-	-	-	6,500	755	1,410	-	2,350	-	1,957	6,070

Notes:

1. Quantities are estimates only and are to be considered approximate.
2. Containers were not opened to examine contents or the quantity of hazardous subsance present. Unless labeled as "Empty", containers were assumed to be full.
3. Additional hazardous substances maybe present that were not readily observable.

TABLE 1A. CdSO4 (CAD) ROOM - SOLOPOWER ESTIMATED CHEMICAL QUANTITIES STORED - SEPTEMBER 2018

Chemical	TOTAL Quantity	Unit	AST	Solvent & Thinner	Paint & Ink	Oil & Lubricant	Antifreeze	Diesel	Heavy Metal	Liquid Plastics	Flammable Gas	Acids	Bases	Other Flammable	Other Corrosive	Other Toxic	Liquid Haz Waste*	Solid Haz Waste
3M Tape Primer 94	0																	
Acetone & Thinner	0																	
Ammonium Hydroxide (NH_4OH)	1,050	gallons											1,050					
AQ-Press Low VOC AQMD Compliant Spray and Wipe Press Wash	0																	
Argon	0																	
Citranox & Liquinox	0																	
Conductive Ink	0																	
Cadmium Sulfate Powder & Cd Debris	2,600	pounds																2,600
Cadmium Sulfate Waste Solution (Including Cd-Se Waste Soln.)	60	gallons															60	
Copper Solution	0																	
Plating Baths	0																	
Di-Ionized Water	0																	
Hydrochloric Acid 28%	0																	
Hydrogen Peroxide (H_2O_2)	0																	
Hydrogen Sulfide	0																	
Indium Trichloride (Corrosive) & Indium Waste Solutions	0																	
Ion Exchange Resins	0																	
Isopropyl Alcohol	0																	
Metal Targets	0																	
Nitrogen (liquid, cryogenic)	0																	
Non-Conductive Ink	0																	
Oils, Lubricants, Greases, Adhesives, Paints, Patching Compounds	0																	
Other Corrosives	0																	
Paint	0																	
Printer Ink Black	0																	
Printer Ink White	0																	
Propylene Glycol n-Propyl Ether	0																	
PV7010 A & B Pottant	0																	
Selenious Acid (diluted)	0																	
Sodium Hydroxide 25% to 50% (WWT) (NaOH) (Liquid)	30	gallons											30					
Sodium Hypochlorite (NaClO) (21.5%)	30	gallons											30					
Sodium Salts	0																	
Solid Selenium	0																	
Sulfuric Acid 25% to 50% (WWT)	150	gallons										150						
Thio-Red (Na2CS3++)[Sulfide polymer (metal precipitant)(liquid)]	0																	
Thiourea (CH_4N_2S) Powder (Photographic fixative)	1,450	pounds																1450
Coolant	0																	
Diesel	0																	
Acetylene for Lab AA	0																	
Non-Chlorinated Solvents	0																	
Contaminated Cleaning Debris	0																	
Solid Haz. Waste	0																	
TOTAL				-	-	-	-	-	-	-	-	150	1,110	-	-	-	60	4,050

Notes:

1. Quantities are estimates only and are to be considered approximate.
2. Containers were not opened to examine contents or the quantity of hazardous subsance present. Unless labeled as "Empty", containers were assumed to be full.
3. Additional hazardous substances maybe present that were not readily observable.
4. Cited hazardous substances are based on container labels that are assumed to accurately reflect containers' contents.

TABLE 1B. WASTEWATER NEUTRALIZATION (WWAN) ROOM - SOLOPOWER ESTIMATED CHEMICAL QUANTITIES STORED - SEPTEMBER 2018

Chemical	TOTAL Quantity	Unit	AST	Solvent & Thinner	Paint & Ink	Oil & Lubricant	Antifreeze	Diesel	Heavy Metal	Liquid Plastics	Flammable Gas	Acids	Bases	Other Flammable	Other Corrosive	Other Toxic	Liquid Haz Waste*	Solid Haz Waste	
3M Tape Primer 94	0																		
Acetone & Thinner	0																		
Ammonium Hydroxide	100	gallons															100		
AQ-Press Low VOC AQMD Compliant Spray and Wipe Press Wash	0																		
Argon	0																		
Citranox & Liquinox	0																		
Conductive Ink	0																		
Cadmium Sulfate Powder & Cd Debris	0																		
Cadmium Sulfate Waste Solution (Including Cd-Se Waste Soln.)	1,270	gallons	X (3)												170		1,100		
Copper Solution (Including Copper Sulfate)	360	gallons															360		
Plating Baths	0																		
Di-Ionized Water	0																		
Hydrochloric Acid 28%	5	gallons										5							
Hydrogen Peroxide (H_2O_2)	30	gallons										30							
Hydrogen Sulfide	0																		
Indium Trichloride (Corrosive) & Indium Waste Solutions	5	gallons															5		
Ion Exchange Resins	0																		
Isopropyl Alcohol	0																		
Metal Targets	0																		
Nitrogen (liquid, cryogenic)	0																		
Non-Conductive Ink	0																		
Oils, Lubricants, Greases, Adhesives, Paints, Patching Compounds	0																		
Other Corrosives	905	gallons	X									5			900				
Paint	0																		
Printer Ink Black	0																		
Printer Ink White	0																		
Propylene Glycol n-Propyl Ether	0																		
PV7010 A & B Pottant	0																		
Selenious Acid (diluted)	0																		
Sodium Hydroxide 25% to 50%(WWT)	300	gallons											300						
Sodium Hypochlorite (NaClO) (21.5%)	0																		
Sodium Salts	0																		
Solid Selenium	0																		
Sulfuric Acid 25% to 50% (WWT)	200	gallons	X									200							WAG
Thio-Red (Na2CS3++)[Sulfide polymer (metal precipitant)(liquid)]	130	gallons															130		
Thiourea (CH_4N_2S) Powder (Photographic fixative)	0																		
Coolant	0																		
Diesel	0																		
Acetylene for Lab AA	0																		
Non-Chlorinated Solvents	0																		
Contaminated Cleaning Debris	0																		
Solid Haz. Waste	200	Drums																200	WW Cd treatment filters
TOTAL				-	-	-	-	-	-	-	-	240	300	-	1,070	-	1,695	200	

Notes:

1. Quantities are estimates only and are to be considered approximate.
2. Containers were not opened to examine contents or the quantity of hazardous subsance present. Unless labeled as "Empty", containers were assumed to be full.
3. Additional hazardous substances maybe present that were not readily observable.
4. Cited hazardous substances are based on container labels that are assumed to accurately reflect containers' contents.

TABLE 1C. PLATING (PLAT) ROOM - SOLOPOWER ESTIMATED CHEMICAL QUANTITIES STORED - SEPTEMBER 2018

Chemical	TOTAL Quantity	Units	AST	Solvent & Thinner	Paint & Ink	Oil & Lubricant	Antifreeze	Diesel	Heavy Metal	Liquid Plastics	Flammable Gas	Acids (Corrosive)	Bases	Other Flammable	Other Corrosive	Other Toxic	Liquid Haz Waste*	Solid Haz Waste
3M Tape Primer 94	0																	
Acetone & Thinner	0																	
Ammonium Hydroxide	0																	
AQ-Press Low VOC AQMD Compliant Spray and Wipe Press Wash	0																	
Argon	0																	
Citranox & Liquinox	0																	
Conductive Ink	0																	
Cadmium Sulfate Powder & Cd Debris	0																	
Cadmium Sulfate Waste Solution (Including Cd-Se Waste Soln.)	0																	
Copper Solution	200	gallons															200	
Plating Baths	0																	
Di-Ionized Water	0																	
Hydrochloric Acid 28%	110	gallons										110						
Hydrogen Peroxide (H_20_2)	0																	
Hydrogen Sulfide	0																	
Indium Trichloride (Corrosive) & Indium Waste Solutions	1,050	gallons													1,050			
Ion Exchange Resins	0																	
Isopropyl Alcohol	0																	
Metal Targets	0																	
Nitrogen (liquid, cryogenic)	0																	
Non-Conductive Ink	0																	
Oils, Lubricants, Greases, Adhesives, Paints, Patching Compounds	0																	
Other Corrosives	0																	
Paint	0																	
Printer Ink Black	0																	
Printer Ink White	0																	
Propylene Glycol n-Propyl Ether	0																	
PV7010 A & B Pottant	0																	
Selenious Acid (diluted & concentrate)	55	gallons										55						
Sodium Hydroxide 25% to 50% (WWT)	0																	
Sodium Hypochlorite (NaClO) (21.5%)	0																	
Sodium Salts	0																	
Solid Selenium	0																	
Sulfuric Acid 30% (WWT)	200	gallons										200						
Thio-Red (Na2CS3++)[Sulfide polymer (metal precipitant)(liquid)]	0																	
Thiourea (CH_4N_2S) Powder (Photographic fixative)	0																	
Coolant	0																	
Diesel	0																	
Acetylene for Lab AA	0																	
Non-Chlorinated Solvents	0																	
Contaminated Cleaning Debris	0																	
Solid Haz. Waste	0																	
TOTAL				0	0	0	0	0	0	0	0	365	0	0	1,050	0	200	0

Notes:

1. Quantities are estimates only and are to be considered approximate.
2. Containers were not opened to examine contents or the quantity of hazardous subsance present. Unless labeled as "Empty",containers were assumed to be full.
3. Additional hazardous substances maybe present that were not readily observable.
4. Cited hazardous substances are based on container labels that are assumed to accurately reflect containers' contents.

TABLE 2

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
1	LOCATION	WAREHOUSE	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	ARGON	10	100.00 POUND(S)	Yes	No
2	NITROGEN	2	100.00 POUND(S)	Yes	No
3	HELIUM	2	100.00 POUND(S)	Yes	No
4	OXYGEN/ARGON BLEND	6	100.00 POUND(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
2	LOCATION	SHIPPING & RECEIVING FLAMMABLE-RATED CABINET	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	ISOPROPYL ALCOHOL	5	1.00 GALLON(S)	Yes	No
2	ACETONE	2	4.00 LITER(S)	Yes	No
3	SCREENPRINTING INK	2	1.00 QUART(S)	Yes	No
4	ACETIC ACID	1	4.00 GALLON(S)	Yes	No
5	SPRAY MAX	3	212.00 GRAM(S)	Yes	No
6	XYLENE	1	1.00 GALLON(S)	Yes	No
7	INLAND 77 VACUUM PUMP OIL	2	5.00 GALLON(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
3	LOCATION	EXTERIOR EMERGENCY POWER GENERATOR	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	DIESEL FUEL (AST)	1	275.00 GALLON(S)	Yes	No

NOTES:

PRACTICE refers to the overall condition and hazardous materials management practice for the listed location observed during the tenant inspection.
SEC/SPILL CON refers to whether secondary containment and/or spill containment is provided for hazardous materials.
LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
4	LOCATION	EXTERIOR	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	LIQUID NITROGEN (AST)	1	6,000.00 GALLON(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
5	LOCATION	SHIPPING & RECEIVING ACID-RATED CABINET	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	NITRIC ACID	25	2.50 LITER(S)	Yes	No
2	BUFFER SOLUTION	7	500.00 MILLILITER(S)	Yes	No
3	ICP-OES WAVECAL	1	500.00 MILLILITER(S)	Yes	No
4	BASE NEUTRALIZER	1	3.00 LITER(S)	Yes	No
5	HYDROCHLORIC ACID	3	2.50 LITER(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
6	LOCATION	SCREEN WASH ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	EASI-SOLV SOLVENT CLEANER	1	55.00 GALLON(S)	No	No

NOTES:

PRACTICE refers to the overall condition and hazardous materials management practice for the listed location observed during the tenant inspection.
SEC/SPILL CON refers to whether secondary containment and/or spill containment is provided for hazardous materials.
LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
7	LOCATION	SCREEN WASH ROOM FLAMMABLE-RATED CABINET	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	AQ-PRESS WASH	1	55.00 GALLON(S)	Yes	No
2	GLYCOL ETHER	1	55.00 GALLON(S)	Yes	No
3	INK	1	1.00 LITER(S)	Yes	No
4	ISOPROPYL ALCOHOL	1	5.00 GALLON(S)	Yes	No
5	ELECTRODAG PD-038A	2	4.00 KILOGRAM(S)	Yes	No
6	INK	2	4.00 KILOGRAM(S)	Yes	No
7	EASI SOLV 140 SOLVENT CLEANER	3	5.00 GALLON(S)	Yes	No

NOTES:

PRACTICE refers to the overall condition and hazardous materials management practice for the listed location observed during the tenant inspection.
SEC/SPILL CON refers to whether secondary containment and/or spill containment is provided for hazardous materials.
LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
8	LOCATION	PLATING ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	SODIUM HYDROXIDE	1	55.00 GALLON(S)	Yes	No
2	SODIUM GALLATE	1	38.00 KILOGRAM(S)	Yes	No
3	RECLAIMED INDIUM PLATING SOLUTION	10	275.00 GALLON(S)	Yes	No
4	HYDROGEN PEROXIDE 35%	1	25.00 LITER(S)	Yes	No
5	SELENIOUS ACID-SODIUM SELENITE SOLUTION	2	1.00 OTHER	Yes	No
6	178-SE SOAK POTASSIUM HYDROXIDE	18	5.00 GALLON(S)	Yes	No
7	SULFURIC ACID	1	20.00 LITER(S)	Yes	No
8	INDIUM TRICHLORIDE	3	41.70 KILOGRAM(S)	Yes	No
9	MURIATIC ACID	3	55.00 GALLON(S)	Yes	No
10	GALLIUM PLATING	1	275.00 GALLON(S)	Yes	No

NOTES:

PRACTICE refers to the overall condition and hazardous materials management practice for the listed location observed during the tenant inspection.
SEC/SPILL CON refers to whether secondary containment and/or spill containment is provided for hazardous materials.
LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
9	LOCATION	WASTEWATER NEUTRALIZATION ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	COPPER SOLUTION NEUTRAL	2	330.00 GALLON(S)	Yes	No
2	COPPER SULFATE	1	55.00 GALLON(S)	Yes	No
3	HYDRAULIC OIL	1	55.00 GALLON(S)	Yes	No
4	LIQUID CAUSTIC SODA	1	250.00 GALLON(S)	No	No
5	SULFURIC ACID (AST)	1	400.00 GALLON(S)	Yes	No
6	AMMONIA SOLUTION 28%	2	275.00 GALLON(S)	No	No
7	COPPER SULFATE-SULFURIC ACID	1	275.00 GALLON(S)	Yes	No
8	THIO-RED (POLYTHIOCARBONATE)	4	55.00 GALLON(S)	No	No
9	ANTI-STATIC CLEANER	4	5.00 GALLON(S)	Yes	No
10	INDIUM TRICHLORIDE	7	200.00 LITER(S)	Yes	No
11	ACETONE	1	946.00 MILLILITER(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
10	LOCATION	WASTEWATER NEUTRALIZATION ROOM ACID-RATED CABINET	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	ACID NEUTRALIZER	1	4.00 LITER(S)	Yes	No

NOTES:

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LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

HAZARDOUS MATERIALS

8/18/2016

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
11	LOCATION	CHILLER ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	MH-490 GLUTARALDEHYDE	2	5.00 GALLON(S)	No	No
2	GRO PRO HYDRONIC WATER TREATMENT	4	5.00 GALLON(S)	No	No
3	MH-1509 BROMINE SOLUTION	1	55.00 GALLON(S)	Yes	No
4	AQUASEPT	2	5.00 GALLON(S)	Yes	No
5	BIOTROL 409	2	55.00 GALLON(S)	Yes	No
6	PERLITE	3	16.00 POUND(S)	No	No
7	PROTECT 514	3	51.00 POUND(S)	No	No
8	ROC 20 KBT	1	56.00 POUND(S)	No	No
9	TRASAR(R) TRAC 106	1	20.00 KILOGRAM(S)	No	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
12	LOCATION	WAREHOUSE CAGE STORAGE	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	ELECTRODAG PD-038A	20	4.00 KILOGRAM(S)	No	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
13	LOCATION	SCREEN PRINTING ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	SILVER PASTE	3	1.00 KILOGRAM(S)	Yes	No
2	MAKE-UP INK	15	1.00 LITER(S)	No	No

NOTES:

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LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

HAZARDOUS MATERIALS

8/18/2016

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
14	LOCATION	CHILLER ROOM FLAMMABLE-RATED CABINET	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	SPRAY PAINT	4	16.00 OUNCE(S)	Yes	No
2	GREASE	2	4.00 KILOGRAM(S)	Yes	No
3	PAINT	8	1.00 GALLON(S)	Yes	No
4	TURBINE OIL	1	5.00 GALLON(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
15	LOCATION	FIRE PUMP ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	DIESEL (AST)	1	90.00 GALLON(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
16	LOCATION	CADMIUM SULFIDE DEPOSITION AREA	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	THIOUREA POWDER	24	63.00 POUND(S)	Yes	No
2	CADMIUM SULFATE	8	15.00 KILOGRAM(S)	Yes	No
3	AMMONIUM HYDROXIDE	4	1,040.00 LITER(S)	Yes	No
4	SULFURIC ACID	3	200.00 LITER(S)	No	No
5	HYDROCHLORIC ACID	1	200.00 LITER(S)	Yes	No
6	CAUSTIC SODA	1	200.00 LITER(S)	Yes	No

NOTES:

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LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
17	LOCATION	CHEMICAL STORAGE AREA	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	SELENIUM BEADS	1	14.50 KILOGRAM(S)	Yes	No
2	SILVER PASTE	12	1.00 KILOGRAM(S)	Yes	No
3	SELENIUM SHOT	15	20.00 KILOGRAM(S)	No	No
4	GALLIUM OXIDE	3	42.00 POUND(S)	No	No
5	GALLIUM OXIDE	2	10.00 KILOGRAM(S)	No	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
18	LOCATION	SHIPPING & RECEIVING BASE-RATED CABINET	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	BUFFER SOLUTION	16	500.00 MILLILITER(S)	Yes	No
2	CORROSION INHIBITOR	1	1.00 GALLON(S)	Yes	No
3	TRISODIUM PHOSPHATE	7	4.50 POUND(S)	Yes	No
4	ACID NEUTRALIZER	4	1.00 LITER(S)	Yes	No
5	POLY CLEANER MIX 30	3	0.50 GALLON(S)	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
19	LOCATION	COMPRESSOR ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	TURBINE OIL G8	1	5.00 GALLON(S)	No	No

NOTES:

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LEAK/STAIN refers to observed leakage from and/or staining by a hazardous material container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 2 - Continued

8/18/2016

HAZARDOUS MATERIALS

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
20	LOCATION	OUTSIDE WAREHOUSE CAGE STORAGE	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	SEC/SPILL CON	LEAK/STAIN
1	BUFFER SOLUTIONS	22	55.00 GALLON(S)	No	No

NOTES:

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TABLE 3

8/18/2016

HAZARDOUS WASTES

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
1	LOCATION	PLATING ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	DISPOSAL METHOD	SEC/SPILL CON	LEAK/STAIN
1	WASTE GALLIUM	1	300.00 GALLON(S)	OFF-SITE	Yes	No
2	WASTE INDIUM	7	300.00 GALLON(S)	OFF-SITE	Yes	No
3	WASTE SELENIUM	2	300.00 GALLON(S)	OFF-SITE	Yes	No
4	WASTE SELENIUM	4	55.00 GALLON(S)	OFF-SITE	Yes	No
5	SOLID SELENIUM & CADMIUM FILTERS & WASTE (APPROX.)	6	250.00 GALLON(S)	OFF-SITE	No	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
2	LOCATION	DRUM WASH ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	DISPOSAL METHOD	SEC/SPILL CON	LEAK/STAIN
1	MIXED SOLVENT WASTE	1	55.00 GALLON(S)	OFF-SITE	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
3	LOCATION	HAZARDOUS WASTE ACCUMULATION CAGE	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	DISPOSAL METHOD	SEC/SPILL CON	LEAK/STAIN
1	USED HEAT TRANSFER OIL	2	55.00 GALLON(S)	OFF-SITE	Yes	No
2	USED SILVER PASTE	141	1.00 PINT(S)	OFF-SITE	Yes	No
3	USED FLUORESCENT BULBS	1	75.00 OTHER	OFF-SITE	Yes	No

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
4	LOCATION	CADMIUM SULFATE DEPOSITION AREA	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	DISPOSAL METHOD	SEC/SPILL CON	LEAK/STAIN
1	AMMONIA SOLUTION 28%	2	150.00 GALLON(S)	OFF-SITE	Yes	No

NOTES:

PRACTICE refers to the overall condition and hazardous waste management practice for the listed location observed during the tenant inspection.
SEC/SPILL CON refers to whether secondary containment and/or spill containment is provided for hazardous wastes.
LEAK/STAIN refers to observed leakage from and/or staining by a hazardous waste container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

TABLE 3 - Continued

8/18/2016

HAZARDOUS WASTES

MARINE DRIVE DISTRIBUTION CENTER I

TENANT	BUILDING	DATE
SOLOPOWER, INC.	**400102**	**7/12/2016**

ACTIVITY #	ACTIVITY TYPE	DESCRIPTION	PRACTICE
5	LOCATION	WASTEWATER NEUTRALIZATION ROOM	1

MATERIAL #	MATERIAL NAME	QUANTITY	CAPACITY	DISPOSAL METHOD	SEC/SPILL CON	LEAK/STAIN
1	SELENIUM CONTAMINATED WASTEWATER	4	300.00 GALLON(S)	OFF-SITE	No	No

NOTES:

PRACTICE refers to the overall condition and hazardous waste management practice for the listed location observed during the tenant inspection.
SEC/SPILL CON refers to whether secondary containment and/or spill containment is provided for hazardous wastes.
LEAK/STAIN refers to observed leakage from and/or staining by a hazardous waste container that is considered to be significant or of potential environmental concern, typically more than 100 square feet in area

APPENDIX A
PHOTOGRAPHS

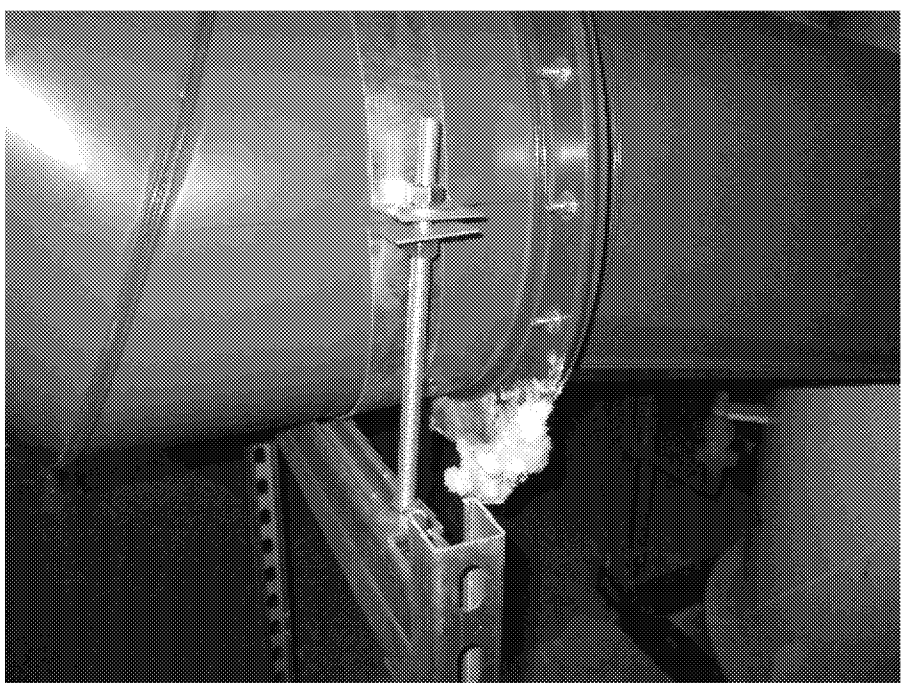
Photograph No. 1: North view of entrance to Site building.

Photograph No. 2: Northeast view of the manufacturing area.

Photograph No. 3: North view of the warehouse area.

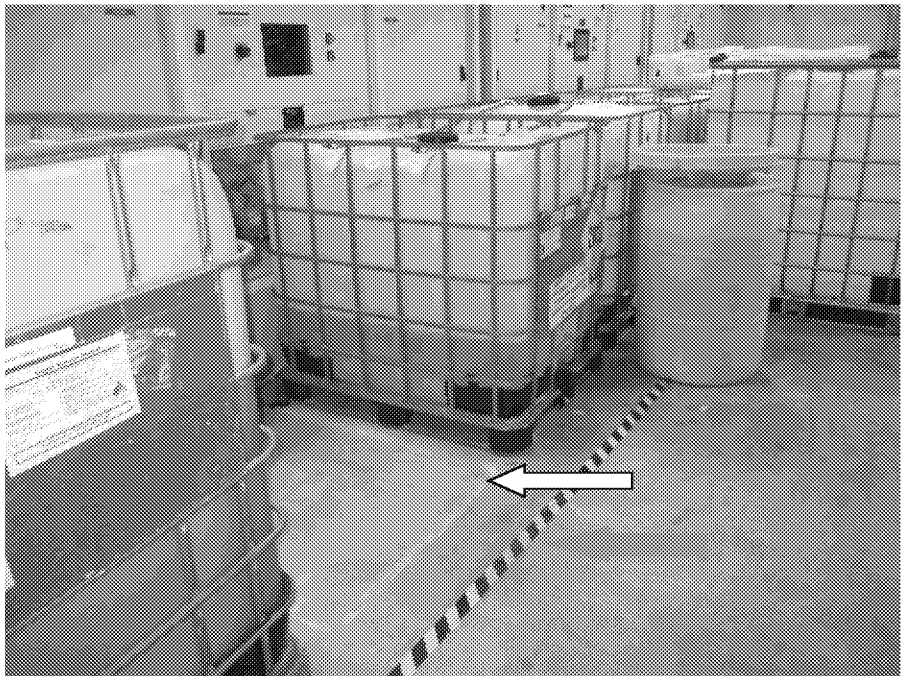
Photograph No. 4: Southwest view of the exterior air handling equipment enclosure.

Photograph No. 5: Southeast view of the cadmium sulfate deposition (CAD) room.



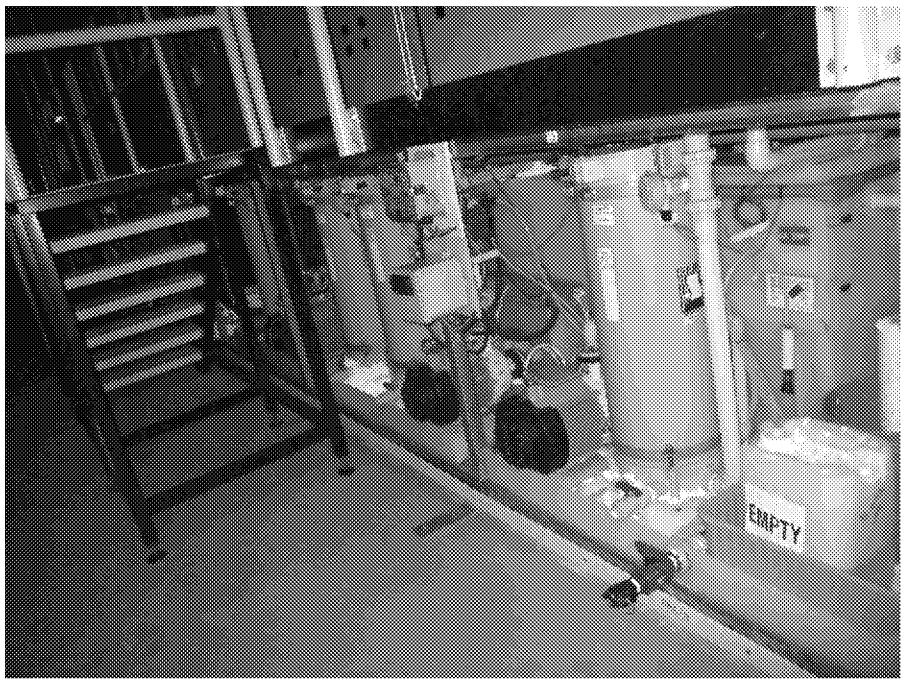
Photograph No. 6: View of encrustation in CAD room.

Photograph No. 7: Southwest view of the wastewater neutralization (WWAN) room with supply air ductwork on the southeast wall and return air ductwork from the plating (PLAT) room on the northwest wall.



Photograph No. 8: Southwest view of residue (white arrow) and brown discoloration (orange arrow) in the WWAN room.

Photograph No. 9: Southwest view of PLAT room with plating equipment (on right).



Photograph No. 10: View of encrustation on gallium canister within secondary containment beneath the plating equipment in the PLAT room.

Photograph No. 11: View of staining (orange arrow) in the PLAT room.

Photograph No. 12: Northeast view of ductwork on the northwest wall of the PLAT room.

APPENDIX B
FACS HAZARDOUS CHEMICALS SAMPLING REPORT

FACS
Forensic Analytical Consulting Services

October 26, 2018

Hazardous Chemicals Sampling

Marine Drive Distribution Center I
6308 N. Marine Drive
Portland, OR 97203

Prepared for:

Tetra Tech, Inc.
17885 Von Karman Avenue
Suite 500
Irvine, California 92614

Prepared By:

Ex. 6 PP / Ex. 7(C)

FACS Project #PJ38671 & PJ39069

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Contents

Introduction

At the request and authorization of Tetra Tech, Inc. (Tetra Tech), Forensic Analytical Consulting Services (FACS) provided sampling and analysis for hazardous chemicals in areas of the building located at the former SoloPower, Inc. facility at the Marine Drive Distribution Center I property, 6308-6310 N. Marine Drive, Portland, Oregon. Tetra Tech's initial authorization was for sampling in two rooms: the former CAD Buffer Layer Room (also referred to as the cadmium sulfate deposition [CAD] Room), the former Waste Water Neutralization Room (also referred to as the WWAN room). For the second authorization, Tetra Tech requested that sampling include a third room, the former Plating (PLAT) Room. The scope of work included both air monitoring, surface wipe, and bulk sampling and analysis.

Two discreet sampling events were conducted on the following dates.

- Phase 1: August 15 and 17, 2018
- Phase 2: September 18 and 21, 2018

All sampling was conducted by Ex. 6 PP / Ex. 7(C) FACS under the supervision of Ex. 6 PP / Ex. 7(C) Ex. 6 PP / Ex. 7(C) Certified Industrial Hygienist (CIH).

Site Characterization

The Marine Drive Distribution Center I property consists of a single building that was formally utilized by a single tenant for light manufacturing (solar panels) and warehouse/distribution purposes. The property is located in a commercial/industrial area.

Scope of Work

In the course of this project, FACS conducted the following scope of work:

1. Phase I (in the CAD and WWAN rooms)
    a. Observations of notable potential hazardous substances residues, discoloration, staining, containers, and equipment
    b. Air monitoring was conducted for selected hazardous substances using a MIRAN SapphIRe Portable Ambient Analyzer and RKI GX- 6000 Gas Monitor (calibrated to chlorine gas) in locations throughout the interior of each room
    c. Collected bulk samples of materials for cadmium analysis (FACS provided samples to the laboratory designated by Tetra Tech
2. Phase 2 (in the CAD, WWAN, and PLAT rooms)
    a. Observations of notable potential hazardous material substances residues, discoloration, staining, containers, and equipment
    b. Air sampling for sulfur dioxide (SO_2) using short-term Dräger-Tubes®
    c. Air sampling for SO_2, hydrochloric acid (HCl), and sulfuric acid (H_2SO_4) using sorbent tubes and pumps
    d. Surface wipe sampling for analysis of selected metals (e.g. cadmium, selenium, indium, and gallium)
    e. Bulk materials sampling for analysis of selected metals (e.g. cadmium, selenium, indium, and gallium)

Data collection methodologies are described in Appendix A. The data collected in the course of the investigation is presented in this report as follows:

- Appendix B: Floor Plan with Sampling Locations
- Appendix C: Photographs
- Appendix D: Analytical Laboratory Reports
- Appendix E: Equipment Calibration Documents

Observations & Results

Phase 1

FACS conducted air monitoring for various analytes on August 15, 2018 and returned for subsequent air monitoring for chlorine gas and bulk sampling for cadmium analysis on August 17, 2018. During work onsite on both days, the HVAC system in the office area and the HVAC system in the CAD Room and The WWAN Room were running. No unusual odors were noticed by personnel onsite in any of the areas accessed.

Air Monitoring

A summary of air monitoring results is provided below. Direct reading measurements were collected as follows:

- Between approximately 10:30 AM and 6:00 PM on August 15, 2018 for other analytes
- Between approximately 9:30 AM and 3:00 PM on August 17, 2018 for chlorine gas

Table 1: Air Monitoring Results (all results in ppm)

Location (#)	Sulfur Dioxide (SO_2)	Ammonia (NH_3)	Benzene	Ethyl benzene	Toluene	Methyl ethyl ketone (MEK)	Nitrous oxide (N_2O)	Chlorine (Cl_2)
CAD Room, at SW Entrance (1)	0.6	5.5	0**	-	-	-	1	0
CAD Room, SW Corner (2)	1.02	5.4	-	-	-	-	-	0
CAD Room, NW Corner (3)	0.11	5.4	-	-	-	-	-	0
CAD Room, Central Area near Chemical Storage (4)	0.84	5.3	-	-	-	-	-	0
CAD Room, at Main S Entry (5)	0.24	4.5	-	-	-	-	-	0
CAD Room, SE Corner, near Maintenance Bench (6)	0.2	5.1	-	-	-	-	-	0
CAD Room, N Side of room, near Ammonia Cleanup Station (7)	0**	4.5	-	-	-	-	-	0
CAD Room, Adjacent East Entrance to WWAN Room (8)	0.24	4.8	-	7.4	33	11	-	0
WWAN Room, Adjacent East Entrance to CAD Room (9)	***3.74***[a]	3.6	-	-	-	-	-	0
WWAN Room, N Side, Near Waste Water Tanks (10)	0**	4.9	-	-	-	-	-	0

Table 1: Air Monitoring Results (all results in ppm)								
Location (#)	Sulfur Dioxide* (SO_2)	Ammonia (NH_3)	Benzene	Ethyl benzene	Toluene	Methyl ethyl ketone (MEK)	Nitrous oxide (N_2O)	Chlorine (Cl_2)
WWAN Room, E Side, Adjacent to Lab Area (11)	0**	4.4	-	-	-	-	-	0
WWAN Room, Adjacent Storage Tanks & Washing Station (12)	0**	4.3	-	-	-	-	-	0
WWAN Room, at S Entry to Room (13)	0**	4.3	-	-	-	-	-	0
WWAN Room, at SW Entry to Room	-	-	0**	-	-	-	-	-

*Inconsistent readings of sulfur dioxide were experienced, potentially due to an unknown interference. Instrument had to be re-zeroed several times.
**Instrument returned negative number (considered to be zero as within the +/- tolerance of the instrument)
[a] Exceeded NIOSH Recommended Exposure Limit (REL) of 2 parts per million (ppm)

Bulk Sampling

Bulk sample locations and results are provided in Table 2. Samples were collected on August 17, 2018.

Table 2: Bulk Sampling for Cadmium		
Sample #	Location	Result (mg/kg)
38671-Cd1	CAD Room, NE Corner, W of "Toxic Gas Scrubber" for Ammonia, below Plastic Intake Duct	0.54
38671-Cd2	CAD Room, NE Corner, W of "Toxic Gas Scrubber" for Ammonia, off Metal Exhaust Duct to Exterior	6.2
38671-Cd3	CAD Room, S Side, "Toxic Gas Scrubber" for Acids, off Plastic Intake Duct	820
38671-Cd4	WWAN Room, N Area Near Dock, Mixed Waste Container Exterior	27
38671-Cd5	WWAN Room, SE Area, Adjacent to Filter Wash Station Drain	2,300
38671-Cd6	WWAN Room, SE corner, Behind Large Collection Tanks and Spent Acid Waste Tank, In Tank Drain Pump Overflow Catch basin	590
38671-Cd7	WWAN Room, N Side, Adjacent to Hazardous Waste Cleanup Vacuum	27

mg/kg is milligrams per kilogram

Phase 2

Air Monitoring for Sulfur Dioxide (Direct reading)

On September 18, 2018, FACS collected direct-read air samples for SO_2 using short-term Dräger-Tubes® and a hand pump bellows outside the building as a control, as well as in the Office, Warehouse, Plating room, WWAN room, and CAD Room. During sampling in the Plating room, WWAN, Room, and CAD Room. All collected samples were determined to be below 0.1 ppm (the limit of detection) by color comparison to a sealed, unused Dräger-Tube®.

Air Sampling for Sulfur Dioxide, Hydrochloric Acid (HCl) and Sulfuric Acid (H_2SO_4)

Air sampling for SO_2, hydrochloric acid (HCl), and sulfuric acid (H_2SO_4) using sorbent tubes was conducted outside the building as a control, as well as inside in the Office, Warehouse - both near the offices and near the hazardous waste accumulation area, the PLAT Room, the WWAN Room, and the CAD Room. The Sampler tubing near sample attachment was adhered to surfaces or placed on a stand at an approximate height of 5' at all sampling locations, to simulate conditions close to the breathing zone of an individual. The samples were sent out to a lab for analysis; All samples results indicated concentrations below the reporting limits (HCL, 0.2 mg/m^3; H_2SO_4, 0.2 mg/m^3).

Surface Wipe and Bulk Samples

On September 19 & 21, 2018, FACS collected wipe and bulk samples from various surfaces of encrustation/deposition, residue, and staining/discoloration throughout the PLAT Room, WWAN Room, and CAD room for metals analysis. Diagrams mapping out sample locations and the extent of encrustation/deposition, residue, and staining/discoloration throughout the facility are contained in Appendix B.

During work onsite on all three days, the HVAC system in the office area was on and running, but the HVAC system in the PLAT Room, WWAN Room, and CAD Room was not running. No unusual odors were noticed by personnel onsite in Office areas or the Warehouse, but a natural gas (sulfurous) odor was noticed in a separate room west of the sampling areas (CDS, WWAN, and PLAT rooms) on the September 19 site visit. NW Natural was called by Tetra Tech, and a NW Natural technician met with FACS onsite during the September 21 site visit and identified the leak. A different sulfur-type odor was also noted at the entry to the PLAT room and WWAN Room on the site visits on September 19 & 21. During the time where the NW Natural technician was onsite on the September 21 site visit, FACS asked the NW Natural technician to identify if the odor in the PLAT and WWAN Rooms were similar to the natural gas odor; the technician stated that they were different, and that the odor in the PLAT and WWN rooms was not natural gas.

A summary of wipe sampling results is provided below:

Table 3. Wipe Sampling Results

Location	Sample ID	Surface Concentration (µg/100 cm^2)			
		Cadmium	Selenium	Gallium	Indium
WWAN room, Adjacent to Entrance	M11, IN3, GA1	15	1000	<0.50	10
WWAN room, Adjacent to Cd/Se waste tanks	M14, IN4, GA2	40	850	<0.50	44
CAD Room, Adjacent SE Entrance	M22	21	550	--	--
CAD Room, Adjacent SW Entrance	M23	6.5	430	--	--
PLAT room, Adjacent to NW Entry Door	M01, IN1	--	--	23	21
PLAT room, Adjacent to SW Entry Door	M06, IN2	--	--	10	28
PLAT Room, N Area, between containers labelled as indium trichloride	IN5	--	--	--	180

µg/100 cm^2 = micrograms per 100 square centimeters

A summary of bulk sampling results is provided below:

Table 4. Bulk Sampling Results			
Location (#)	Sample ID	Material Concentration (mg/kg)	
		Cadmium	Selenium
WWAN room, acid storage tank flush pump catch basin in SE corner	M13	360	<24
WWAN room, mobile hazardous waste cleanup vacuum	M16	<7.0	68
CAD Room, sulfate deposition area, at ammonia scrubber exhaust duct	M19	<4.8	<24
CAD Room, acid scrubber exhaust ducting	M21	8.4	<2.5

mg/kg = milligrams per kilogram

Limitations

This investigation is limited to the conditions and practices observed and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment, expertise and the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

Please do not hesitate to contact our offices at Ex. 6 PP / Ex. 7(C) with any questions or concerns. Thank you for the opportunity to assist Tetra Tech promoting a more healthful environment.

Respectfully,
FORENSIC ANALYTICAL

Ex. 6 PP / Ex. 7(C)

Reviewed by:
FORENSIC ANALYTICAL

Ex. 6 PP / Ex. 7(C)

Appendix A
Materials and Methods

Safety

During the initial investigation (Phase I), FACS personnel wore a half-face respirator with P/N/Acid Gas/OV stacked cartridges, safety glasses, double nitrile gloves (with the base pair sealed to the Tyvek suit with duct tape), and a full impermeable Tyvek suit with additional Tyvek foot coverings.

Upon return for the second phase, FACS wore similar PPE as above until after it was confirmed that SO_2 concentrations were acceptable. During all material sampling, FACS personnel wore a half-face respirator with minimally P100 cartridges, safety glasses, double nitrile gloves (with the base pair sealed to the Tyvek suit with duct tape), and a full impermeable Tyvek suit with additional Tyvek foot coverings. Personnel conduct both positive and negative leak tests upon each use of the respiratory in line with FACS training program.

Sampling

Phase 1

Indoor Air Monitoring –

- ***Hazardous Gases (General)*** – Gases were monitored using a MIRAN SapphIRe Portable Ambient Analyzer. These analyzers utilize infrared spectroscopy for single and multi-gas monitoring. Monitoring was conducted using the standard on-board library. The instrument was calibrated by Field Environmental Instruments, Inc. for standard gases nitrous oxide and sulfur hexafluoride. Before use in each area the site personnel zeroed and check instrument operation in compliance with manufacturer's recommendations. Readings were obtained at an approximate height of 4 feet above the floor. At each sample location, readings were monitored over an approximately 1 minute time period and the stabilized maximum reading was recorded.

- ***Chlorine Gas*** – Chlorine gas was measured using an RKI-GX6000 single gas unit calibrated by Field Environmental Instruments, Inc. to chlorine gas which is detected with an electrical conductivity (EC) sensor. Readings were obtained in a similar manner as described above for hazardous gases.

Bulk Sampling – Samples were scraped into clean plastic or glass centrifuge tubes using a metal chisel or paint scraper. All sampling tools were thoroughly cleaned of all visible particulate and residue using moist Ghost Wipes and outer nitrile gloves were removed and replaced between samples and sampling locations. Samples were transported to TestAmerica Laboratories in Beaterton, Oregon along with a properly filled out COC form. TestAmerica Laboratories analyzed the samples using inductively coupled plasma – mass spectrometry (ICP/MS), as per EPA Method 6020A for metals analysis, reporting cadmium content only.

Phase 2

Air Monitoring –

Direct reading SO_2 – After an initial leak check, air was drawn into a short-term Dräger-Tube® [0.1 to 3 parts per million (ppm) range] using an Accuro bellows pump. As per the tube recommendations, 100 strokes were used. Tubes were checked for color change as per the manufacturer's recommendations.

Hydrochloric Acid and Sulfuric Acid - Air was drawn through a silica gel tube using a pump calibrated to 0.2 liters per minute (LPM). Each sample was collected over an approximately 120 minute time period. Particulates were also collected on the glass fiber plug. Samples were transported to an SGS Galson laboratory along with a properly filled out COC form. In the lab, the glass fiber plug and the silica gel tubes were desorbed with standard eluent and analyzed using Ion Chromatography (IC) as per Occupational Safety and Health Administration (OSHA) Method ID-165SG.

Sulfur Dioxide – Air was drawn through a glass tube containing impregnated activated beaded carbon (IABC) using a pump calibrated to 0.1 LPM. Each sample was collected over an approximately 120 minute time period. A prefilter/cassette assembly was used to collect particulate. Samples were transported to an SGS Galson laboratory along with a properly filled out COC form. In the lab, the sampling medium was desorbed and analyzed as sulfate using ion chromatography (IC) as per OSHA Method ID-200.

Wipe Samples (Metals) –

- Cadmium, Selenium, and Gallium – A ghost wipe, commonly used for sampling lead in dust, was used to collect surface deposition in a defined 10 cm X 10 cm area (100 cm^2) using the National Institute of Safety and Health (NIOSH) surface wipe method. Each wipe sample was placed in a clean plastic centrifuge tube for transport to the lab. Samples were transported to an SGS Galson laboratory along with a properly filled out COC form. SGS Galson exported the wipe samples analyzed for Gallium to Liberty Mutual Industrial Hygiene Laboratory, located in Hopkinton, MA Group. In both labs, each sample was digested and analyzed by inductively coupled plasma – atomic absorption spectrometer (ICP-AAS), as per modified method SW846 3050B/ 6010C/ OSHA 125G ICP B for cadmium, modified method SW846 3050B/ 6010C/ OSHA 125G ICP P for selenium, and modified method OSHA ID-121 for gallium.

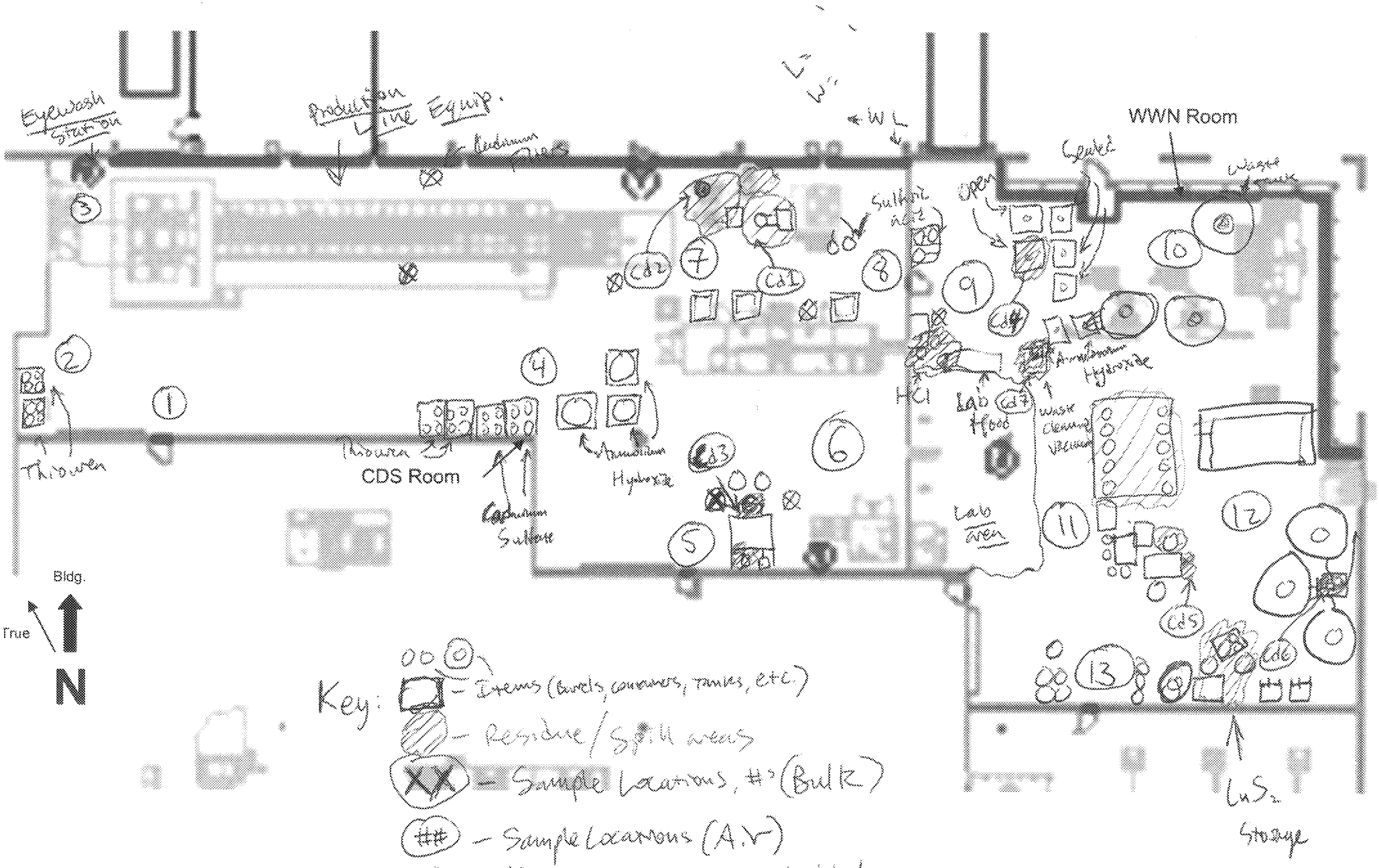
- Indium – A mixed cellulose ester (MCE) filter, pre moistened with a ghost wipe, was used to collect surface deposition in a defined 10 cm X 10 cm area (100 cm^2) using the NIOSH surface wipe method. Each wipe sample was placed in a clean plastic centrifuge tube for transport to the lab. Samples were transported to an SGS Galson laboratory along with a properly filled out COC form. In the lab, each sample was digested and analyzed by ICP/MS, as per modified method NIOSH 7303/OSHA ID-125G.

Bulk Sampling - Samples were scraped with a metal chisel or placed by hand into a steril 2 oz. Whirl Pak™ plastic sample bag, sealed, then placed in clean plastic centrifuge tubes for transport to the lab. All sampling tools were thoroughly cleaned of all visible particulate and residue using moist Ghost Wipes and outer nitrile gloves were removed and replaced between samples and sampling locations. Samples were transported to an SGS Galson laboratory along with a properly filled out COC form. The samples were held at the lab for potential analysis, but no bulk samples from the Phase 2 sampling were analyzed.

Appendix B
Floor Plans with Sample Locations

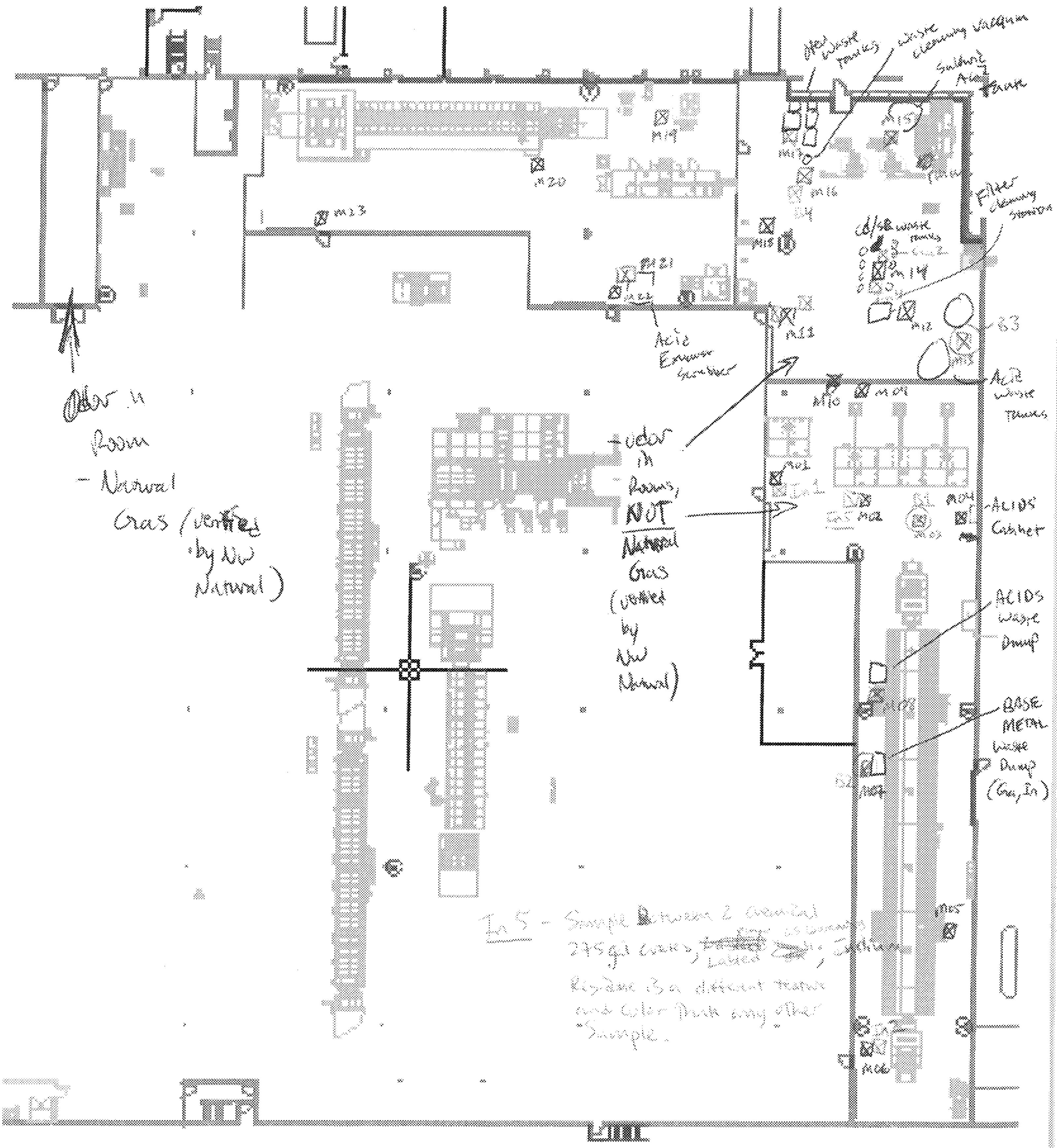
8/17/18

FORMER SOLOPOWER FACILITY 6308 N. MARINE DR. – CDS Buffer Layer Room (CDS Rm.) and Waste Water Neutralization Room (WWN Rm.)



WIPE SAMPLING (9/18 + 9/21)

PJ39069
9/18/18



Key:

~~Cd wipe location~~

~~Se wipe location~~

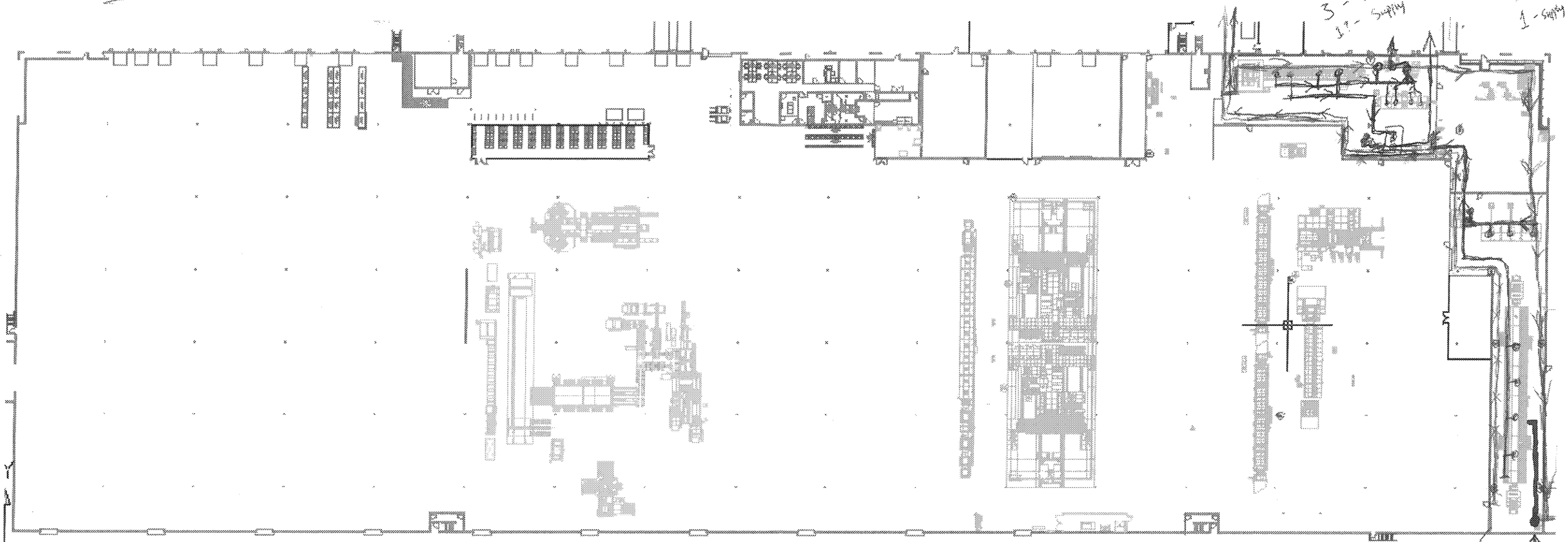
☒ - Bulk Location

☒ - Wipe Location

☒ 9/21/18 Sampling Locations

DUCTING DIAGRAM

PD39069
9/18/18

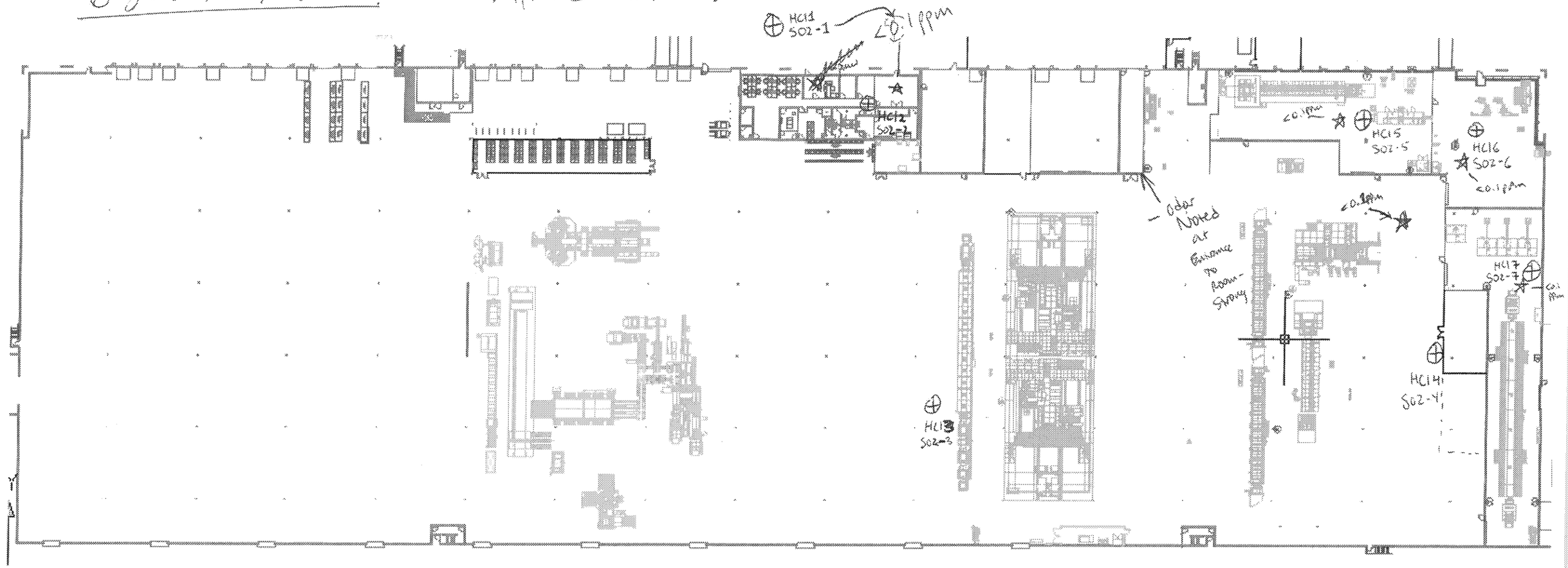


Key:

- ACIDS + BASES Plastic "Hood" Duct → ASSUME CONTAMINATED
- "make-up" Air - Supply, Has Vents (Round)
- "GLOVE BOX AREA" — Return, Has Vents (Square Grille), X = Grille Location
- "GLOVE PROCESS" — Return/EXHAUST, NO Vent

PJ39069
9/18/18

6308 N. Marine Dr. → AIR SAMPLE LOCATIONS



Key:

☆ - Indicator tube Sampling Locations (SO_2)

⊕ - pump sampling locations (SO_2, HCl, Sulfuric Acid)

Appendix C
Photographs

Photo #1: Facility exterior.

Photo #2: CAD Room – SW Entrance

Photo #3: CAD Room – Initial Air Testing.

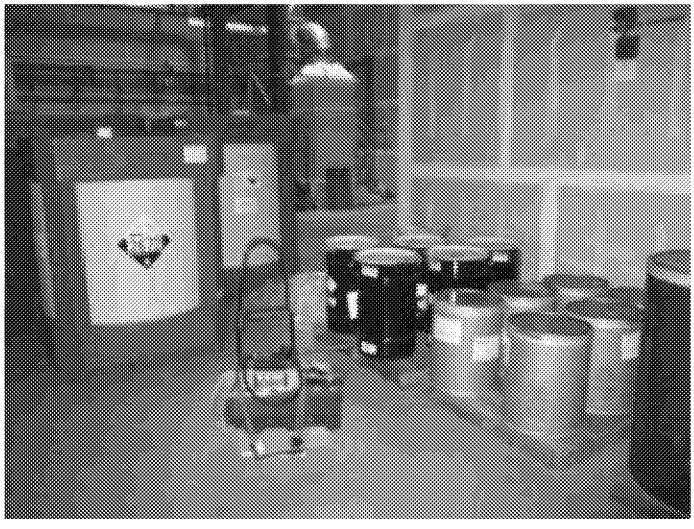


Photo #4: CAD Room – Air monitoring Throughout Interior.

Photo #5: CAD Room – Stored Chemicals, Including Cadmium Sulfate and Ammonium Hydroxide.

Photo #6: CAD Room – Hazardous Waste Bins; Visible Residue on Exterior.

Photo #7: CAD Room – Visible Residue on Floor, Adjacent to Ammonia Toxic Gas Scrubber. (38671-Cd1)

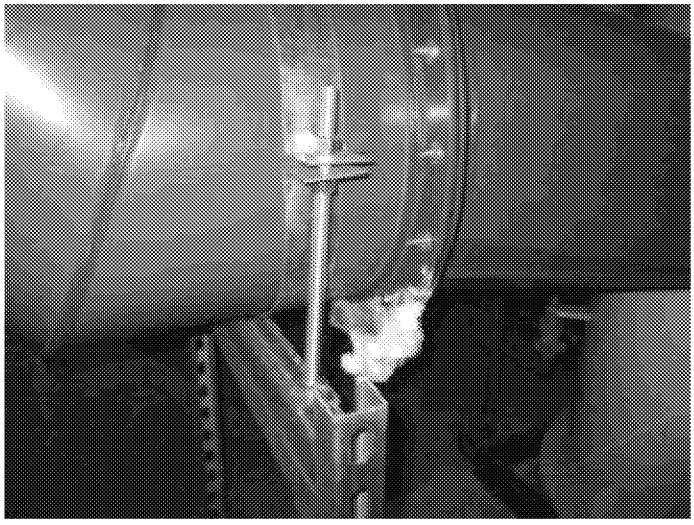


Photo #8: CAD Room – Residue on Intake Duct for Ammonia Toxic Gas Scrubber.

Photo #9: CAD Room – Residue on Exhaust Duct for Ammonia Toxic Gas Scrubber.
(38671-Cd2)

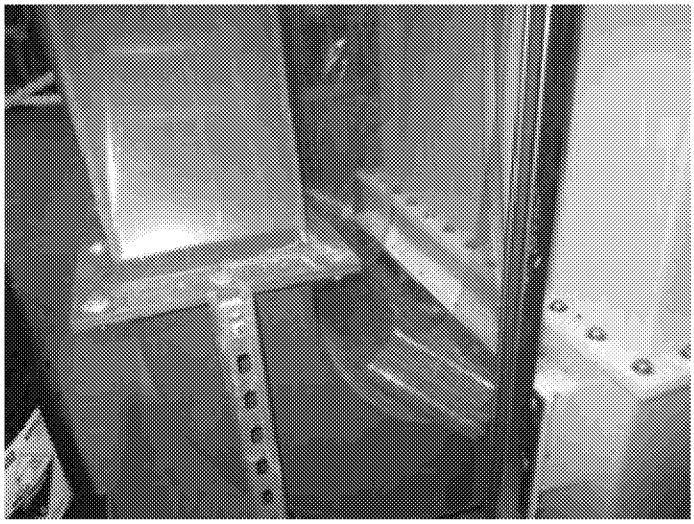


Photo #10: CAD Room – Residue on Intake Duct for Acid Toxic Gas Scrubber.
(38671-Cd3)

Photo #11: WWAN Room – Air monitoring Throughout Interior.

Photo #12: WWAN Room – Residue on Empty Waste Containers (open).
(38671-Cd4)

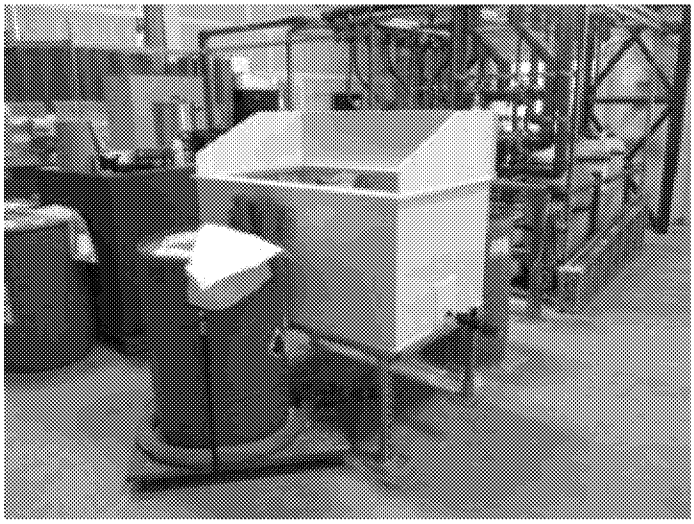


Photo #13: WWAN Room – Contaminated Filter Wash Station; Residue on Drain and Floor.
(38671-Cd5)

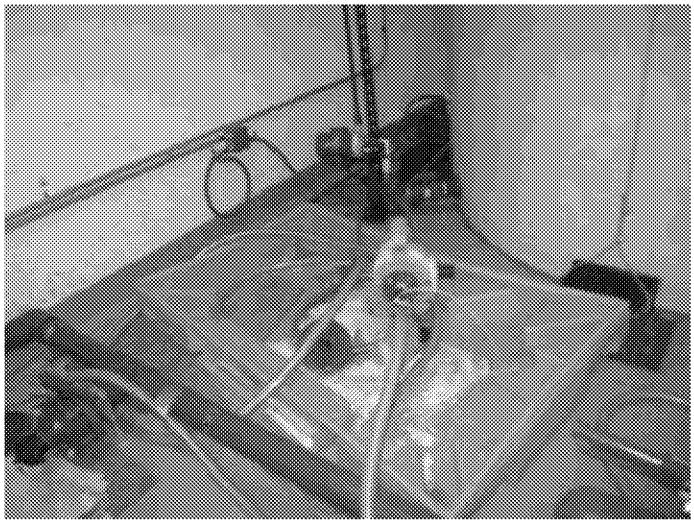


Photo #14: WWAN Room – Drain Pump for Spent Acid Waste Tank; Residue Visible in Basin.
(38671-Cd6)

Photo #15: WWAN Room – Hazardous Waste Cleanup Vacuum; Hazard Label Notes Selenium, Cadmium. Visible Residue on Unit and on Floor.
(38671-Cd7)

Photo #16: WWAN Room – Lab Hood Area; Residues on Multiple Surfaces, HCl Containers Open in Area.

Ex. 6 PP / Ex. 7(C)

Photo #17: Personnel – Respiratory PPE.

Photo #18: Personnel – Taped Up Tyvek Suit Gaps.

Photo #19: WWAN Room – Liquid Copper (Cu_2) Stored in South End of Room.

Photo #20: WWAN Room – Sulfuric Acid (H_2SO_4) Stored in South End of Room; Residue Visible covering containers.

Photo #21: Facility Exterior – Follow-up Air & Wipe Sampling.

Photo #22: Drager Colormetric Testing Tubes – SO_2.

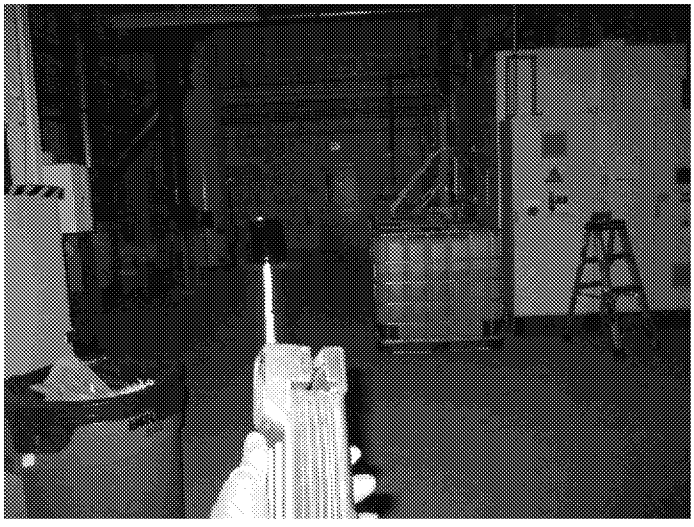


Photo #23: Testing in Office, Warehouse, CAD Room, WWAN Room, and PLAT Room – Tube Air Testing Tool ("Bellows"); All Results Below 0.1 ppm SO_2.

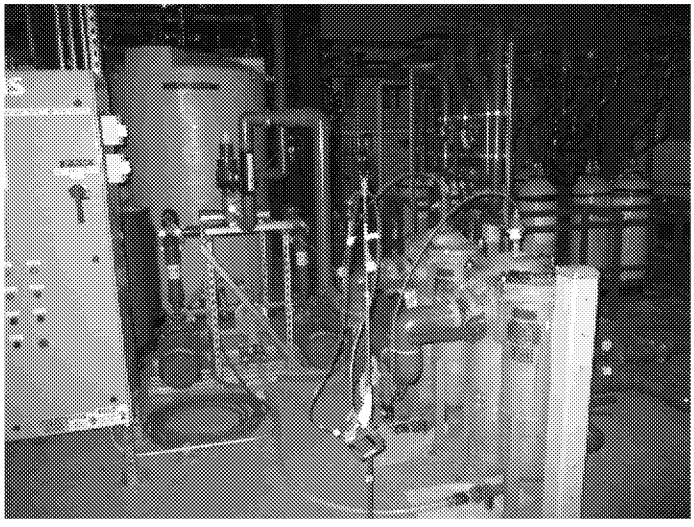


Photo #24: HCl, H2SO4, and SO_2 Pump Sampling Setup – Testing throughout Warehouse, Office, PLAT Room, CAD Room, and WWAN Room; All Sample Results Below Reporting Limits.

Photo #24: Warehouse – Entrance to PLAT Room; Hazardous waste storage area visible behind fence, locked.

Photo #26: PLAT Room – Visible Staining/Discoloration on the floor, almost throughout.

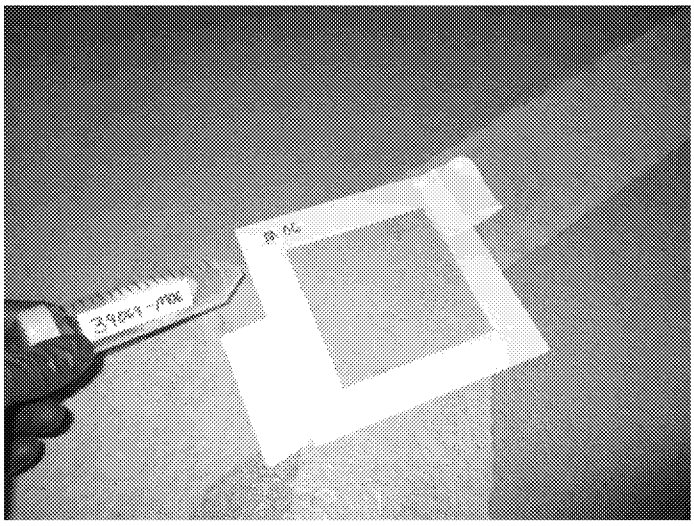


Photo #27: PLAT Room – Wipe Sample for Cadmium (Cd) and Selenium (Se) near Southwest Entry Door.

Photo #28: PLAT Room – Visible "Encrustation" Depositions on floor.

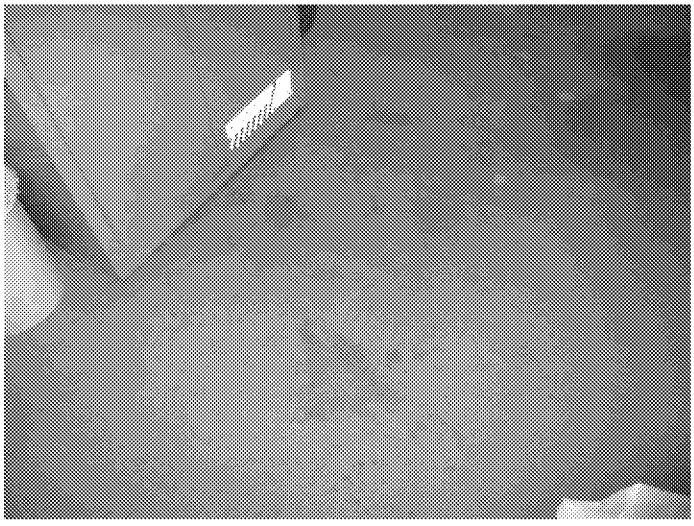


Photo #29: PLAT Room – Staining/Discoloration in front of all Acid Storage Cabinets.

Photo #30: PLAT Room – Waste Cleanup Vacuum for Selenium; Visible Depositions along wall.

Photo #31: Visible Residue on the floor, Underneath Indium storage crate areas.

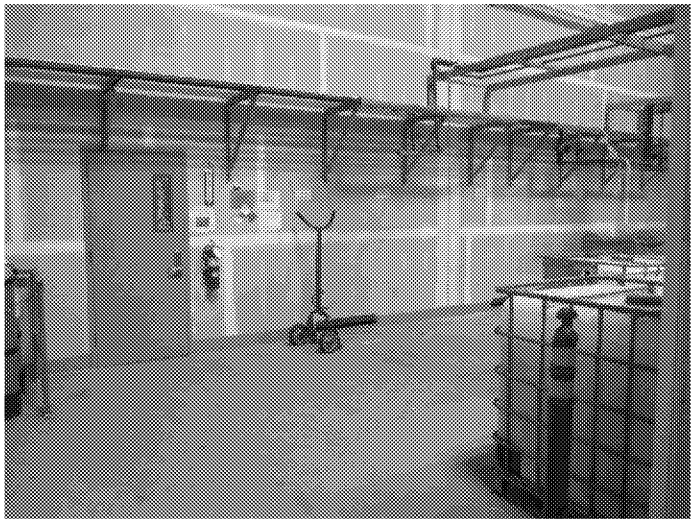


Photo #32: PLAT Room – North End; Visible Residues, Depositions, Staining/Discoloration in area. Entry to WWAN Room on left side of photo.

Photo #33: WWAN Room – Visible Staining/Discoloration on the floor, almost throughout.

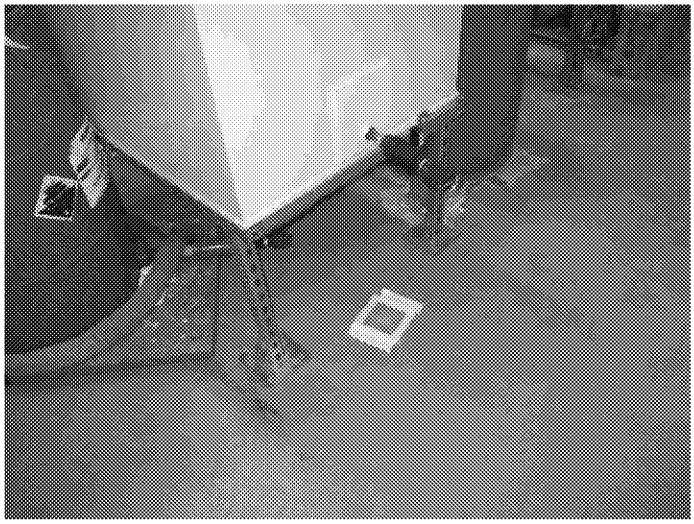


Photo #34: WWAN Room – Cd/Se Wipe Sample in same area as Bulk Sample Cd5.

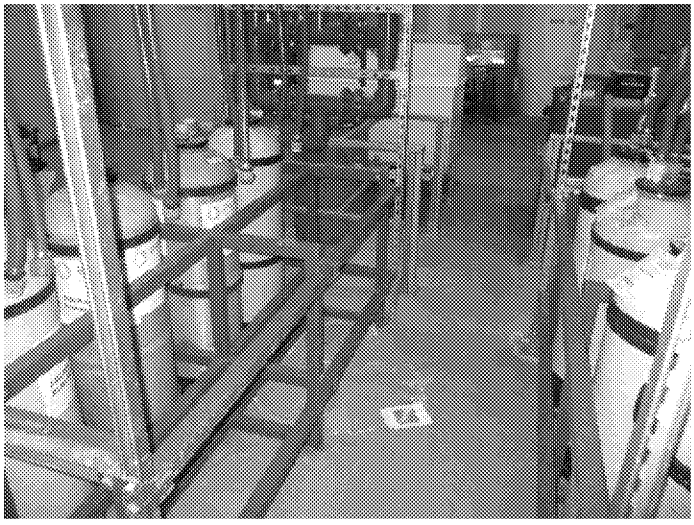


Photo #35: WWAN Room – Cd/Se Wipe Sample on floor depositions adjacent to the Cd/Se waste tanks.

Photo #36: CAD Room – Cd/Se Wipe Samples near entry doors.

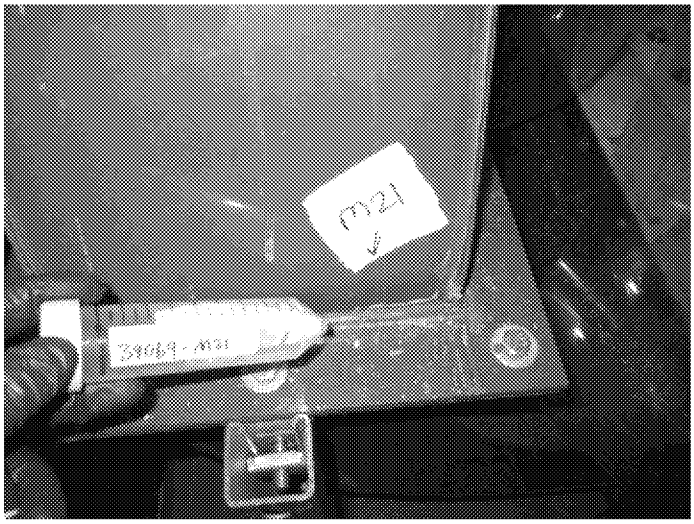


Photo #37: CAD Room – Cd/Se Bulk sample in same area as previous bulk sample Cd3.

Photo #38: Warehouse – Entrance to PLAT Room.

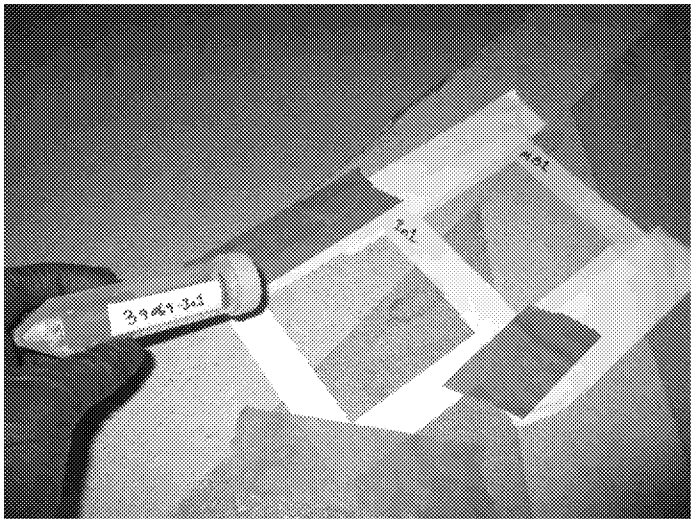


Photo #39: PLAT Room – Indium Wipe Sampling, adjacent Cd/Se wipe samples near entrances.

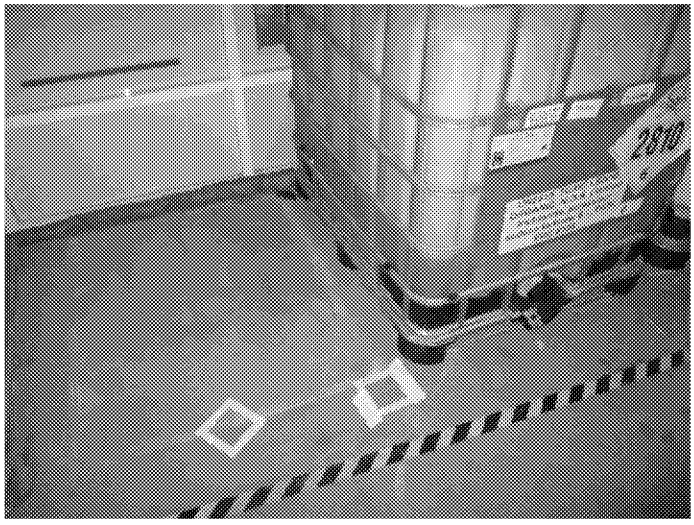


Photo #40: PLAT Room – Indium Wipe Sampling of Residue near Indium storage crate.

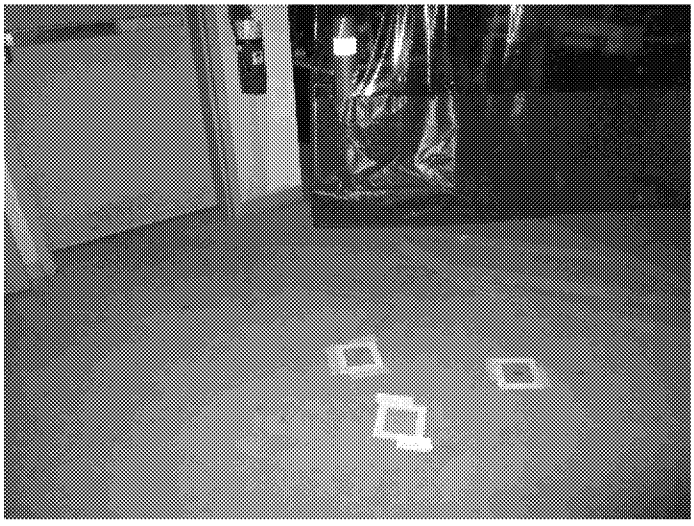


Photo #41: WWAN Room – Indium (In) and Gallium (Ga) Wipe Sampling, adjacent Cd/Se wipe sample near entrance.

Photo #42: WWAN Room – Indium (In) and Gallium (Ga) Wipe Sampling, adjacent Cd/Se wipe sample M14.

Appendix D
Analytical Laboratory Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-79680-1
Client Project/Site: SoloPower Site

For:
Tetra Tech, Inc.
17885 Von Karman Ave, Ste 500
Irvine, California 92614

Attn: Ex. 6 PP / Ex. 7(C)

Ex. 6 PP / Ex. 7(C)

Authorized for release by:
8/21/2018 10:24:00 AM

Ex. 6 PP / Ex. 7(C)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Job ID: 580-79680-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-79680-1

Receipt
The samples were received on 8/17/2018 4:55 PM. The temperature of the cooler at receipt was 25.2° C.

Receipt Exception
Insufficient sample was provided to perform percent moisture analysis for this job. Sample results are calculated without percent moisture correction.

Metals
No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd1
Date Collected: 08/17/18 14:13
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-1
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.54		0.30	0.059	mg/Kg		08/20/18 09:53	08/20/18 20:05	10

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd2
Date Collected: 08/17/18 14:19
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-2
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	6.2		0.30	0.057	mg/Kg		08/20/18 09:53	08/20/18 20:10	10

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd3
Date Collected: 08/17/18 14:30
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-3
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	820		0.59	0.11	mg/Kg		08/20/18 09:53	08/20/18 20:14	10

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd4
Date Collected: 08/17/18 14:50
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-4
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	27		0.30	0.057	mg/Kg		08/20/18 09:53	08/20/18 20:18	10

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd5
Date Collected: 08/17/18 15:04
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-5
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2300		0.38	0.073	mg/Kg		08/20/18 09:53	08/20/18 20:22	10

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd6
Date Collected: 08/17/18 15:27
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-6
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	590		0.33	0.064	mg/Kg		08/20/18 09:53	08/20/18 20:26	10

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd7
Date Collected: 08/17/18 15:43
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-7
Matrix: Solid

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	11		5.1	0.98	mg/Kg		08/20/18 09:53	08/20/18 20:31	10

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 580-281957/18-A
Matrix: Solid
Analysis Batch: 282040

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.20	0.039	mg/Kg		08/20/18 09:53	08/20/18 18:36	5

Lab Sample ID: LCS 580-281957/19-A
Matrix: Solid
Analysis Batch: 282040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.00	4.66		mg/Kg		93	80 - 120

Lab Sample ID: LCSD 580-281957/20-A
Matrix: Solid
Analysis Batch: 282040

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 281957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	5.00	4.60		mg/Kg		92	80 - 120	1	20

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd1

Lab Sample ID: 580-79680-1
Matrix: Solid
Date Collected: 08/17/18 14:13
Date Received: 08/17/18 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:05	FCW	TAL SEA

Client Sample ID: 38671-Cd2

Lab Sample ID: 580-79680-2
Matrix: Solid
Date Collected: 08/17/18 14:19
Date Received: 08/17/18 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:10	FCW	TAL SEA

Client Sample ID: 38671-Cd3

Lab Sample ID: 580-79680-3
Matrix: Solid
Date Collected: 08/17/18 14:30
Date Received: 08/17/18 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:14	FCW	TAL SEA

Client Sample ID: 38671-Cd4

Lab Sample ID: 580-79680-4
Matrix: Solid
Date Collected: 08/17/18 14:50
Date Received: 08/17/18 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:18	FCW	TAL SEA

Client Sample ID: 38671-Cd5

Lab Sample ID: 580-79680-5
Matrix: Solid
Date Collected: 08/17/18 15:04
Date Received: 08/17/18 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:22	FCW	TAL SEA

Client Sample ID: 38671-Cd6

Lab Sample ID: 580-79680-6
Matrix: Solid
Date Collected: 08/17/18 15:27
Date Received: 08/17/18 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:26	FCW	TAL SEA

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Client Sample ID: 38671-Cd7

Date Collected: 08/17/18 15:43
Date Received: 08/17/18 16:55

Lab Sample ID: 580-79680-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			281957	08/20/18 09:53	T1H	TAL SEA
Total/NA	Analysis	6020A		10	282040	08/20/18 20:31	FCW	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Laboratory: TestAmerica Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19
ANAB	DoD ELAP		L2236	01-19-19
ANAB	ISO/IEC 17025		L2236	01-19-19
California	State Program	9	2901	11-05-18
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-18
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-19

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: SoloPower Site

TestAmerica Job ID: 580-79680-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-79680-1	38671-Cd1	Solid	08/17/18 14:13	08/17/18 16:55
580-79680-2	38671-Cd2	Solid	08/17/18 14:19	08/17/18 16:55
580-79680-3	38671-Cd3	Solid	08/17/18 14:30	08/17/18 16:55
580-79680-4	38671-Cd4	Solid	08/17/18 14:50	08/17/18 16:55
580-79680-5	38671-Cd5	Solid	08/17/18 15:04	08/17/18 16:55
580-79680-6	38671-Cd6	Solid	08/17/18 15:27	08/17/18 16:55
580-79680-7	38671-Cd7	Solid	08/17/18 15:43	08/17/18 16:55

TestAmerica Portland
8920 SW Gemini Dr (Building 7)

Beaverton, OR 97008-7123
phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

Loc: 580
79680

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Steven Grod	Site Contact:	Date:	COC No:
Tetra Tech, Inc.	Tel/Fax: (949) 809-5076 / (949) 809-5010	Lab Contact:	Carrier:	1 of 1 COCs
17885 Von Karman Avenue, Suite 500	Analysis Turnaround Time			Sampler: Ex. 6 PP / Ex. 7(C)
Irvine, CA 92614	☐ CALENDAR DAYS ☑ WORKING DAYS			For Lab Use Only:
(949) 809-5000 Phone	TAT if different from Below _____			Walk-in Client:
(949) 809-5010 FAX	☐ 2 weeks			Lab Sampling:
Project Name: SoloPower	☐ 1 week			
Site: 6308 North Marine Drive, Portland, OR 97203	☐ 2 days			Job / SDG No.:
P O # T24396.036 (T2)	☑ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	EPA Method 6020 (Cadmium only)	Sample Specific Notes:
38671 - Cd 1	8/17/18	1413						X	CDS Room
38671 - Cd 2		1419						X	↓
38671 - Cd 3		1430						X	
38671 - Cd 4		1450						X	WWN Room
38671 - Cd 5	↓	1504						X	
38671 - Cd 6		1527						X	
38671 - Cd 7	↓	1543						X	↓

580-79680 Chain of Custody

RUSH!

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Analysis for cadmium only - EPA Method 6020 (low level). Report results to both the Reporting Limit (RL) and the Method Detection Limit (MDL). Rush (24-hour) turnaround.

75.2

Custody Seals Intact: ☐ Yes ☑ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by: Ex. 6 PP / Ex. 7(C)	Company: FACS	Date/Time: 8/17/18 16:55	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 8.18.18 0950

IR5 = 1.2 1.2 w/ cs.

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 580-79680-1

Login Number: 79680
List Number: 1
Creator: O'Connell, Jason I

List Source: TestAmerica Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

SGS GALSON

Ex. 6 PP / Ex. 7(C)

September 24, 2018

DOH ELAP #11626
AIHA-LAP #100324

Account# 23802

Login# L456866

Dear Ex. 6 PP / Ex. 7(C)

Enclosed are the analytical results for the samples received by our laboratory on September 20, 2018. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. When possible, non-IOM samples will be retained for 14 days following the date of this report (unless an extension is specifically requested). IOM samples are retained for 7 days.

Current Scopes of Accreditation can be viewed at www.sgsgalson.com in the accreditations section of the "About" page.

Please contact Ex. 6 PP / Ex. 7(C) if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Ex. 6 PP / Ex. 7(C)

Laboratory Director

Enclosure(s)

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : 6308 N. MARINE DR
Project No. : PJ39069
Date Sampled : 18-SEP-18
Date Received : 20-SEP-18

Account No.: 23802
Login No. : L456866
Date Analyzed : 21-SEP-18
Report ID : 1091668

Sulfuric Acid

Sample ID	Lab ID	Air Vol liter	Front ug	Back ug	Total ug	Conc mg/m3
39069-HCL-1	L456866-17	24	<5	<5	<5	<0.2
39069-HCL-2	L456866-18	24	<5	<5	<5	<0.2
39069-HCL-3	L456866-19	24	<5	<5	<5	<0.2
39069-HCL-4	L456866-20	24	<5	<5	<5	<0.2
39069-HCL-5	L456866-21	24	<5	<5	<5	<0.2
39069-HCL-6	L456866-22	24	<5	<5	<5	<0.2
39069-HCL-7	L456866-23	24	<5	<5	<5	<0.2
39069-HCL-8	L456866-24	NA	<5	<5	<5	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 5 ug
Analytical Method : Mod. OSHA ID-165SG; IC
Collection Media : Orbo 53

Submitted by: MCM
Date : 24-SEP-18
Supervisor : MWJ

Approved by: NKP
NYS DOH # : 11626
QC by : NKP

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : 6308 N. MARINE DR
Project No. : PJ39069
Date Sampled : 18-SEP-18
Date Received : 20-SEP-18

Account No.: 23802
Login No. : L456866
Date Analyzed : 21-SEP-18
Report ID : 1091669

Hydrochloric Acid

Sample ID	Lab ID	Air Vol liter	Front ug	Back ug	Total ug	Conc mg/m3	ppm
39069-HCL-1	L456866-17	24	<5	<5	<5	<0.2	<0.1
39069-HCL-2	L456866-18	24	<5	<5	<5	<0.2	<0.1
39069-HCL-3	L456866-19	24	<5	<5	<5	<0.2	<0.1
39069-HCL-4	L456866-20	24	<5	<5	<5	<0.2	<0.1
39069-HCL-5	L456866-21	24	<5	<5	<5	<0.2	<0.1
39069-HCL-6	L456866-22	24	<5	<5	<5	<0.2	<0.1
39069-HCL-7	L456866-23	24	<5	<5	<5	<0.2	<0.1
39069-HCL-8	L456866-24	NA	<5	<5	<5	NA	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 5 ug
Analytical Method : Mod. OSHA ID-165SG; IC
Collection Media : Orbo 53

Submitted by: MCM
Date : 24-SEP-18
Supervisor : MWJ

Approved by: NKP
NYS DOH # : 11626
QC by : NKP

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million

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LABORATORY ANALYSIS REPORT

Client	: Forensic Analytical Lab Compto	Account No.:	23802
Site	: 6308 N. MARINE DR	Login No. :	L456866
Project No.	: PJ39069		
Date Sampled	: 18-SEP-18	Date Analyzed :	21-SEP-18
Date Received	: 20-SEP-18	Report ID :	1091649

Sulfur Dioxide

Sample ID	Lab ID	Air Vol liter	Front ug	Back ug	Total ug	Conc mg/m3	ppm
39069-S02-1	L456866-1	12	<10	<10	<10	<1	<0.4
39069-S02-2	L456866-2	12	<10	<10	<10	<1	<0.4
39069-S02-3	L456866-3	12	<10	<10	<10	<1	<0.4
39069-S02-4	L456866-4	12	<10	<10	<10	<1	<0.4
39069-S02-5	L456866-5	12	<10	<10	<10	<1	<0.4
39069-S02-6	L456866-6	12	<10	<10	<10	<1	<0.4
39069-S02-7	L456866-7	12	<10	<10	<10	<1	<0.4
39069-S02-8	L456866-8	NA	<10	<10	<10	NA	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 10 ug	Submitted by: MCM	Approved by: NKP
Analytical Method : mod. OSHA ID-200; IC	Date : 24-SEP-18	NYS DOH # : 11626
Collection Media : 226-80	Supervisor : MWJ	QC by : NKP

<	-Less Than	mg	-Milligrams	m3	-Cubic Meters	kg	-Kilograms	NA	-Not Applicable
>	-Greater Than	ug	-Micrograms	l	-Liters	NS	-Not Specified	ppm	-Parts per Million

ND -Not Detected

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : 6308 N. MARINE DR
Project No. : PJ39069
Date Sampled : 18-SEP-18
Date Received : 20-SEP-18

Account No.: 23802
Login No. : L456866
Date Analyzed : 21-SEP-18
Report ID : 1091627

Particulate Sulfate

Sample ID	Lab ID	Air Vol liter	Total ug	Conc mg/m3	ppm
39069-S02-1	L456866-9	12	<5	<0.4	<0.1
39069-S02-2	L456866-10	12	<5	<0.4	<0.1
39069-S02-3	L456866-11	12	<5	<0.4	<0.1
39069-S02-4	L456866-12	12	<5	<0.4	<0.1
39069-S02-5	L456866-13	12	<5	<0.4	<0.1
39069-S02-6	L456866-14	12	<5	<0.4	<0.1
39069-S02-7	L456866-15	12	<5	<0.4	<0.1
39069-S02-8	L456866-16	NA	<5	NA	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 5 ug
Analytical Method : mod. NIOSH 6004; IC
Collection Media : 25mm Tef.

Submitted by: MCM
Date : 24-SEP-18
Supervisor : MWJ

Approved by: NKP
NYS DOH # : 11626
QC by : NKP

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million

GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Forensic Analytical Lab Compton
Site : 6308 N. MARINE DR
Project No. : PJ39069

Date Sampled : 18-SEP-18
Date Received: 20-SEP-18
Date Analyzed: 21-SEP-18

Account No.: 23802
Login No. : L456866

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceeding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L456866 (Report ID: 1091649):
SOPs: ii-oid200(10)
Total ug corrected for a desorption efficiency of 80%.
The desorption efficiency (DE) used to correct the samples is from the published method.

L456866 (Report ID: 1091649):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Sulfur Dioxide	N/A	N/A

L456866 (Report ID: 1091668):
SOPs: IC-SOP-27(6)

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

GALSON

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www.sgsgalson.com

Client Name : Forensic Analytical Lab Compton
Site : 6308 N. MARINE DR
Project No. : PJ39069

Date Sampled : 18-SEP-18 Account No.: 23802
Date Received: 20-SEP-18 Login No. : L456866
Date Analyzed: 21-SEP-18

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Sulfuric Acid	+/-7.4%	106%

L456866 (Report ID: 1091669):
SOPs: IC-SOP-27(6)

L456866 (Report ID: 1091669):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Hydrochloric Acid	+/-9.4%	105%

L456866 (Report ID: 1091627):
SOPs: ii-n6004(11)

L456866 (Report ID: 1091627):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Particulate Sulfate	+/-7.5%	102%

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

773263244271
Date: 09/20/18
Shipper: FEDEX
Initials: MAK
L4568660
Prep: UNKNOWN

GALSON CHAIN OF CUSTODY

R36

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☒ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

Client Acct No.: 23802

Original Prep No.: PCA496922

CS Rep: BHONEYCUTT

Online COC No.: 163646

Report To: Mr. Michael Andrew
Company Name: Forensic Analytical
Address 1: 17400 SW Upper Boones Ferry Rd
Address 2: Suite 245
City, State Zip: Portland, OR 97224
Phone No.: 503 - 595 - 1001
Cell No.:
Email reports to: mandrew@forensicanalytical.com, portland@forensicanalytical.com
Email EDD to: mandrew@forensicanalytical.com, portland@forensicanalytical.com
Comments:

Invoice To: Accounts Payable
Company Name: Forensic Analytical Lab Compton
Address 1: 21228 Cabot Blvd
Address 2:
City, State Zip: Hayward, CA 94545
Phone No.: 510 - 266 - 4600
Email Address: ap@forensicanalytical.com
Comments:
P.O. No.:
Payment info.: ☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments:

State Sampled: OR

Please indicate which OEL(s) this data will be used for: ☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA ☐ IAQ: _____ (Specify Limit(s)) ☐ Other: _____ (Specify Other)

Site Name: 6308 N. Marine Dr. | Project: PJ39069 | Sampled By: PMW | List description of industry or Process/interferences present in sampling area:

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
39069-SO2-1	9/18/18	Treated Anasorb 747/226-80	~~2~~ 1 PMW 12	2	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-2	9/18/18	Treated Anasorb 747/226-80	2 PMW 12	2	Sulfur Dioxide	mod. OSHA ID-200; IC	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By:	Ex. 6 PP / Ex. 7(C)	9/19/18	12:20pm	Received By:			
Relinquished By:				Received By	Ex. 6 PP / Ex. 7(C)	9/20/18	0940

Ex. 6 PP / Ex. 7(C)

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No.: 163646
Prep No.: PCA496922
Account No.: 23802
Draft: 9/17/2018 6:04:36 PM

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SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
39069-SO2-3	9/18/18	Treated Anasorb 747/226-80	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-4	9/18/18	Treated Anasorb 747/226-80	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-5	9/18/18	Treated Anasorb 747/226-80	pmp 24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-6	9/18/18	Treated Anasorb 747/226-80	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-7	9/18/18	Treated Anasorb 747/226-80	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-8	9/18/18	Treated Anasorb 747/226-80	Ø	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-1	9/18/18	25MM PTFE	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-2	9/18/18	25MM PTFE	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-3	9/18/18	25MM PTFE	pmp 24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-4	9/18/18	25MM PTFE	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-5	9/18/18	25MM PTFE	24 12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

		Date	Time		Print Name / Signature	Date	Time
Chain of Custody	Ex. 6 PP / Ex. 7(C)						
Relinquished By :		9/19/18	12:00pm	Received By :		9/20/18	0940
Relinquished By :				Received By :	Ex. 6 PP / Ex. 7(C)		

* You must fill in these columns for any samples which you ar

Samples received after 3pm will be considered as next day's business.

No. : 163646
Prep No. : PCA496922
Account No. : 23802
Draft : 9/17/2018 6:04:36 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
39069-SO2-6	9/18/18	25MM PTFE	12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-7	9/18/18	25MM PTFE	12	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-SO2-8	9/18/18	25MM PTFE	Ø	L	Sulfur Dioxide	mod. OSHA ID-200; IC	
39069-HCl 1	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 2	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 3	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 4	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 5	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 6	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 7	9/18/18	ORBO 53	24	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	
39069-HCl 8	9/18/18	ORBO 53	Ø	L	Hydrochloric Acid & Sulfuric Acid	Mod. OSHA ID-165SG; IC	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	Ex. 6 PP / Ex. 7(C)	9/19/18	12:20 PM	Received By :			
Relinquished By :				Received By :	Ex. 6 PP / Ex. 7(C)	9/20/18	0940

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 163646
Prep No. : PCA496922
Account No. : 23802
Draft : 9/17/2018 6:04:36 PM

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SGS GALSON

Ex. 6 PP / Ex. 7(C)

October 1, 2018

Account# 23802

Login# L457038

Dear Ex. 6 PP / Ex. 7(C)

Enclosed are the analytical results for the samples received by our laboratory on September 21, 2018. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

The samples submitted for Gallium were subcontracted to Liberty Mutual Insurance Group. Their report is enclosed in its entirety.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. When possible, non-IOM samples will be retained for 14 days following the date of this report (unless an extension is specifically requested). IOM samples are retained for 7 days.

Current Scopes of Accreditation can be viewed at www.sgsgalson.com in the accreditations section of the "About" page.

Please contact Ex. 6 PP / Ex. 7(C) if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Ex. 6 PP / Ex. 7(C)

Enclosure(s)

SGS GALSON

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto Account No.: 23802
Site : PE21 FACS PORTLAND TETRA TECH Login No. : L457038
Project No. : PJ39069
Date Sampled : NS Date Analyzed : 24-SEP-18 - 25-SEP-18
Date Received : 21-SEP-18 Report ID : 1091978

Client ID : 39069-M11 **Lab ID : L457038-11** **Area : 100 cm2**
Date Sampled : **Date Analyzed : 09/25/18**

Parameter	LOQ ug	Total ug	Conc	Units
Cadmium	1.5	15	0.15	ug/cm2
Selenium	7.5	1000	10	ug/cm2

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Ghost Submitted by: EJB/SJW Approved by: KEG
Date : 26-SEP-18 NYS DOH # : 11626 Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091978

Client ID : 39069-M14 **Lab ID : L457038-14** **Area : 100 cm2**
Date Sampled : **Date Analyzed : 09/25/18**

Parameter	LOQ ug	Total ug	Conc	Units
Cadmium	1.5	40	0.40	ug/cm2
Selenium	7.5	850	8.5	ug/cm2

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Ghost
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091978

Client ID : 39069-M22 **Lab ID : L457038-22** **Area : 100 cm2**
Date Sampled : **Date Analyzed : 09/24/18**

Parameter	LOQ ug	Total ug	Conc	Units
Cadmium	1.5	21	0.21	ug/cm2
Selenium	7.5	550	5.5	ug/cm2

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Ghost
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091978

Client ID : 39069-M23 **Lab ID : L457038-23** **Area : 100 cm2**
Date Sampled : **Date Analyzed : 09/24/18**

Parameter	LOQ ug	Total ug	Conc	Units
Cadmium	1.5	6.5	0.065	ug/cm2
Selenium	7.5	430	4.3	ug/cm2

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Ghost
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091975

Client ID : 39069-M13 **Lab ID : L457038-13**
Date Sampled : **Date Analyzed : 09/24/18**

Parameter	LOQ mg/kg	Total ug	Conc	Units
Cadmium	4.8	37	360	mg/kg
Selenium	24.	<2.5	<24	mg/kg

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Bulk
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091975

Client ID : 39069-M16 **Lab ID : L457038-16**
Date Sampled : **Date Analyzed : 09/24/18**

Parameter	LOQ mg/kg	Total ug	Conc	Units
Cadmium	7.0	<0.50	<7.0	mg/kg
Selenium	35.	4.9	68	mg/kg

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Bulk
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091975

Client ID : 39069-M19 **Lab ID : L457038-19**
Date Sampled : **Date Analyzed : 09/24/18**

Parameter	LOQ mg/kg	Total ug	Conc	Units
Cadmium	4.8	<0.50	<4.8	mg/kg
Selenium	24.	<2.5	<24	mg/kg

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Bulk
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069
Date Sampled : NS
Date Received : 21-SEP-18

Account No.: 23802
Login No. : L457038
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091975

Client ID : 39069-M21 **Lab ID : L457038-21**
Date Sampled : **Date Analyzed : 09/24/18**

Parameter	LOQ mg/kg	Total ug	Conc	Units
Cadmium	0.10	8.4	NA	mg/kg
Selenium	0.50	<2.5	NA	mg/kg

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Collection Media: Bulk
Date : 26-SEP-18

Submitted by: EJB/SJW
NYS DOH # : 11626

Approved by: KEG
Supervisor : KEG QC by: AMD

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million LOQ-Limit of Quantitation

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Client Name : Forensic Analytical Lab Compton
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069

Date Sampled :
Date Received: 21-SEP-18
Date Analyzed: 24-SEP-18 - 25-SEP-18

Account No.: 23802
Login No. : L457038

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceeding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L457038 (Report ID: 1091975):
Reported results reflect elemental analysis of the requested metals. Certain compounds may not be solubilized during digestion, resulting in data that is biased low.
SOPs: MT-SOP-27(1), MT-SOP-5(25)
SW846 6010C is referenced for lead data only.
Levels of quantitation vary with actual sample mass used for preparation.
Samples are digested and analyzed as received unless specified otherwise.

L457038-21 (Report ID: 1091975):
Insufficient sample mass provided: 0.02g is the minimum sample mass that can be submitted in order to report mg/kg results (0.0128g was submitted). Only total ug data could be reported.

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms	ppm -Parts per Million		
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified	ND -Not Detected	NA -Not Applicable	

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Client Name : Forensic Analytical Lab Compton
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069

Date Sampled :
Date Received: 21-SEP-18
Date Analyzed: 24-SEP-18 - 25-SEP-18

Account No.: 23802
Login No. : L457038

L457038 (Report ID: 1091975):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Cadmium	N/A	N/A
Selenium	N/A	N/A

Parameter	Method
Cadmium	mod. SW846 3050B/ 6010C/ OSHA 125G ICP B
Selenium	mod. SW846 3050B/ 6010C/ OSHA 125G ICP P

L457038 (Report ID: 1091978):
Reported results reflect elemental analysis of the requested metals. Certain compounds may not be solubilized during digestion, resulting in data that is biased low.
SOPs: im-mwvghost(23), MT-SOP-27(1)
SW846 6010C is referenced for lead data only.
Ghost wipes are not recommended media for Selenium due to varying background on media.
Reported LOQs may not be applicable as they were derived from studies performed on 37mm MCE filters
Method blank contained 3.5 ug of Selenium. Results for Selenium may be biased high and should be considered estimated.

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

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Client Name : Forensic Analytical Lab Compton
Site : PE21 FACS PORTLAND TETRA TECH
Project No. : PJ39069

Date Sampled :
Date Received: 21-SEP-18
Date Analyzed: 24-SEP-18 - 25-SEP-18

Account No.: 23802
Login No. : L457038

L457038 (Report ID: 1091978):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Cadmium	N/A	N/A
Selenium	N/A	N/A

Parameter	Method
Cadmium	mod SW846 3051A/6010C/NIOSH9102 ICP GHMW
Selenium	mod SW846 3051A/6010C/NIOSH9102 ICP GHMW

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

Analysis Results

Report Date: 9/26/2018

Liberty Mutual Industrial Hygiene Laboratory

71 Frankland Road
Hopkinton, MA 01748
(800) 230-6263 FAX: (508) 435-3575
EMail: LMIHLaboratory@LibertyMutual.com Web: www.libertymutual.com

Ex. 6 PP / Ex. 7(C)
SGS Galson Laboratories
6601 Kirkville Rd

E Syracuse, NY 13057

Survey Date: 9/21/2018 **Project ID:** L457038
Date Received: 9/24/2018 **Project Number:**
Customer PO: 23802 **Project Name:**
Collector: Ex. 6 PP / Ex. 7(C) **Project Location:**

Sample Set: 1809197

LM Sample No.	*Sample No.*	*Analyte*	*Sampling Time (min.)*	*Sampling Rate (liters/min)*	*Volume (liters)*	*Results*
1809197-001	39069-M01	Gallium				23 ug/100 sq cm
		Gallium (ug)				23 ug/sample
1809197-002	39069-M06	Gallium				10 ug/100 sq cm
		Gallium (ug)				10 ug/sample
1809197-003	In-House Blank	Gallium				<0.50 ug/100 sq cm
		Gallium (ug)				<0.50 mg/sample

Analyte	Media	LOQ	Method	*Modify	Instrument	Blank Corrected	Analysis Date
Gallium	Wipe	0.50 ug/sample	OSHA ID-121	Yes	ICP	Yes	26-Sep-18
Gallium (ug)	Wipe	0.50 ug/sample	OSHA ID-121	Yes	ICP	Yes	26-Sep-18

* Modify: A "Yes" indicates a minor modification in the Method.

Analyzed by: Ex. 6 PP / Ex. 7(C)

Peer Reviewed by: Ex. 6 PP / Ex. 7(C)

Approved By: Ex. 6 PP / Ex. 7(C)

Lab Comments

A blank was not submitted with this sample set. An in-house blank was used. NIOSH and OSHA require the submission of a sample blank with each set of samples.

Laboratory Uncertainty of Measurement, at 95% confidence interval (K=2):

39069-M01:
Probable Bias: -1.6 ug
Analytical Uncertainty: +/- 0.61 ug

39069-M06:
Probable Bias: -0.74 ug
Analytical Uncertainty: +/- 0.27 ug

This report was revised and reissued on 9/28/2018 to correct the comment regarding the in house blank.

ILF4 Ver: 3 Approval Date: 01/07/2008 Approval By: wferro

1809197

GALSON LABORATORIES

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www.galsonlabs.com

Liberty Mutual

Check if change of address ☐

New Client ? yes ☐ no ☐

Report To : Ex. 6 PP / Ex. 7(C)
SGS Galson Laboratory
6601 Kirkville Road
East Syracuse, NY 13057
Phone No. : Ex. 6 PP / Ex. 7(C)

Invoice To : Ex. 6 PP / Ex. 7(C)
SGS Galson Laboratory
6601 Kirkville Road
East Syracuse, NY 13057
Phone No. : Ex. 6 PP / Ex. 7(C)
Fax No. 315-437-0571

Site Name :

Project : L457038

Sampled By : Client

Turnaround Time	Due Date
☐ Standard	
☐ 4 Business Days	
☐ 3 Business Days	
☑ 2 Business Days	09/26/18
☐ Next Day by 6pm	
☐ Next Day by Noon	
☐ Same day	

Verbal Authorization : 23802

Credit Card No. : Card Holder Name : Exp. :

Fax Results To : Email Only Please Fax No. : Email Only Please

Email Results To : Syracuse.Subcontracting@sgs.com

Sample Identification	Date Sampled	Collection Medium	*Air Volume (liters)/ Passive Monitors (Min)	Analysis Requested	Method Reference	Specific DL Needed
39069-M01		Wipe	100	Gallium	NIOSH 7300	
39069-M06		Wipe	100	Gallium	NIOSH 7300	
LAB BLANK		Wipe	NA	Gallium	NIOSH 7300	

Comments:Please add lab blank.

State/Province of sampling event:

If the method being reported is not on your laboratory's current AIHA scope of accreditation, please state that in your report.
Please provide an uncertainty statement in accordance with AIHA LQAP policy document Section 2A.5.4.3.

Chain of Custody	Print Name	Signature	Date/Time
Relinquished by :	Ex. 6 PP / Ex. 7(C)	Repo... CT-18 19:24	9/21/18,1543
Received by LAB :		Ex. 6 PP / Ex. 7(C)	9/24/18

ED_005854_00000131-00117

L457038

FACS
Forensic Analytical Consulting Services

WIPE SAMPLE REQUEST FORM

R27

Client: **PE21 FACS Portland** **Tetra Tech**	Sampled by: **PMW** PM: Ex. 6 PP / Ex. 7(C) Date: 9/19/18
Contact: Ex. 6 PP / Ex. 7(C) Phone: Ex. 6 PP / Ex. 7(C)	Special Instructions: E-mail results to E-mail results to portland@forensicanalytical.com
Site: **6308 N. Marine Drive** **Portland OR**	Turnaround Time: 1-Day ☐ 2-Day ☒ 3-Day ☐ 5-Day ☐ Other ☐ Due Date and Time: **48-hr Turn**
Client No.: **C3467** FACS Job #: **PJ39069**	Analysis: HOLD for Analysis until contacted

Sample Number	Sample Location	Component	Area	~~Media/Lot#/Exp. Date~~ TYPE (Bulk/Wipe)	~~Result~~
39069-M01	Plating Room, NW Adj (~5') from Entry Door	Floor	100 cm²	ALL NG WIPE 9/21/18	Red-Brown Residue
-M02	N Area, Between HAZ CHEM Containers (Indium Trichloride, Potassium Sodium Tartrate)	Floor	100 cm²	WIPE	Silvery, Lustrous
-M03	N Area, walking path near N End of production Line	Floor	—	BULK	White, Granular
-M04	" ", In front of NE Acids cabinet	Floor	100 cm²	WIPE	Red-Brown Residue, Tan Residue
-M05	SE Corner, under production line Access stair	Floor	100 cm²	WIPE	Red-Orange Residue
-M06	~~Adj~~ PMW Adj (~5') from SW Entry Door	Floor	100 cm²	WIPE	Red-Brown Residue
-M07	E of production Line, Adj Base metal waste catch	Floor	—	BULK	White, Granular
-M08	E of production Line, Adj Acid waste catch	Floor	—	BULK	Yellow orange powder
-M09	N, Adj Entry to WWN Room; Cd/Se Debris collection area	Floor	100 cm²	WIPE	Bluish-White Residue
-M10	Entry door to WWN Room, on Handle area of door	Door	100 cm²	WIPE	White Residue

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: Ex. 6 PP / Ex. 7(C)	Date & Time: 9/19/18 22:00	Received by:	Date & Time: Condition Acceptable ☐ Yes ☐ No
Relinquished by:	Date & Time:	Received by: Ex. 6 PP / Ex. 7(C)	Date & Time: 9/21/18 0917 Condition Acceptable ☒ Yes ☐ No

FACS

WIPE SAMPLE REQUEST FORM

Client:	**PE21 FACS Portland** **Tetra Tech**	Sampled by: **PMW** PM: **Ex. 6 PP / Ex. 7(C)** Date: 9/19/18	
Contact: **Ex. 6 PP / Ex. 7(C)**	Phone: **Ex. 6 PP / Ex. 7(C)**	Special Instructions:	E-mail results to E-mail results to portland@forensicanalytical.com
Site:	**6308 N. Marine Drive** **Portland OR**	Turnaround Time:	1-Day ☐ 2-Day ☒ 3-Day ☐ 5-Day ☐ Other ☐ Due Date and Time: **48-hr Turn**
Client No.: **C3467**	**FACS Job #: PJ39069**	Analysis: HOLD for analysis until contacted	

Sample Number	Sample Location	Component	Area	~~Method/Lab/Exp Date~~ TYPE	~~Result~~ color/texture
39069 - M11	Waste Water Neutralization Room, Adj West Entrance (WWN Room)	Floor	100 cm²	WIPE	Brown Residue
- M12	Adj Filter Cleaner Drain (Same as previous sample (d5))	Floor	100 cm²	WIPE	Red orange crystalline powder
- M13	from Acid Storage Tank Flush pump Catch in SE corner (Same as previous sample (d6))	Catch Bin	—	BULK	Yellow + white crusty residue
- M14	Adj Cd/SE Waste tanks	Floor	100 cm²	WIPE	White + Brown crusty Residue
- M15	New Sulfuric acid tank	Floor	—	BULK	pink powder
- M16	Waste cleanup vacuum (Same as previous sample (d7))	Floor	—	BULK	white, Granular crystals
- M17	Open waste containers (Same as previous sample (d4))	Container	—	BULK	Red + white crusty Residue
- M18	Lab area Floor	Floor (Same as previous sample (d1))	100 cm²	WIPE	Red - Brown Residue
- M19	Cadmium Sulfate Deposition Area, At Ammonia Scrubber (CCDS Room) Exhaust Duct	Ductwork (Ammonia Exhaust)	—	BULK	Orange + white crystals
- M20	Floor at SE Stairs to platform Line Pin	Floor	100 cm²	WIPE	Red - orange Residue

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☒ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: **Ex. 6 PP / Ex. 7(C)**	*Date & Time:* 9/19/18 2200	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:* **Ex. 6 PP / Ex. 7(C)**	*Date & Time:* 9/21/18 0917 Condition Acceptable ☑ Yes ☐ No

FACS
Forensic Analytical Consulting Services

WIPE SAMPLE REQUEST FORM

Client:	**PE21 FACS Portland** **Tetra Tech**		Sampled by: **PMW**	PM: **Ex. 6 PP / Ex. 7(C)**		Date: 9/19/18	
Contact:	**Ex. 6 PP / Ex. 7(C)**	Phone: **Ex. 6 PP / Ex. 7(C)**	Special Instructions:	E-mail results to E-mail results to portland@forensicanalytical.com			
Site:	**6308 N. Marine Drive** **Portland OR**		Turnaround Time:	1-Day ☐	2-Day ☒	3-Day ☐	5-Day ☐	Other ☐	Due Date and Time: **48-hr Turn**
Client No.:	**C3467**	**FACS Job #: PJ39069**	Analysis: HOLD for Analysis until corrected						

Sample Number	Sample Location	Component	Area	~~Media/Lot#/Exp. Date~~ TYPE	~~Result~~ Color/Texture
39069-M21	CDS Room, ACID Scrubber Exhaust ducting (Same as previous sample	Ducting (ACID Exhaust)	—	BULK	Clear to white, Granular Crystal
-M22	CDS Room, Adj SE Entrance (~8') "C03"	Floor	100Cm²	WIPE	Brown Residue
-M23	CDS Room, Adj SW Entrance (~8')	Floor	100Cm²	WIPE	White, Granular

M22 (Wipe) - Cadmium and Selenium
M23 (Wipe) - Cadmium and Selenium
M19 (Bulk) - Cadmium and Selenium
M21 (Bulk) - Cadmium and Selenium
M11 (Wipe) - Cadmium and Selenium
M14 (Wipe) - Cadmium and Selenium
M13 (Bulk) - Cadmium and Selenium
M16 (Bulk) - Cadmium and Selenium
M01 (Wipe) - Gallium
M06 (Wipe) - Gallium
Per client.
kms 09/27/18

773263254880
Date:09/21/18
Shipper:FEDEX
Initials:MAK
Prep:UNKNOWN

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☐ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: **Ex. 6 PP / Ex. 7(C)**	*Date & Time:* 9/19/18 2200	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No
Relinquished by:	*Date & Time:*	**Ex. 6 PP / Ex. 7(C)**	*Date & Time:* 9/21/18 0917 Condition Acceptable ☑ Yes ☐ No

SGS GALSON

Ex. 6 PP / Ex. 7(C)

October 1, 2018

Account# 23802

Login# L457247

Dear Ex. 6 PP / Ex. 7(C)

Enclosed are the analytical results for the samples received by our laboratory on September 24, 2018. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

The samples submitted for Gallium were subcontracted to Liberty Mutual Insurance Group. Their report is enclosed in its entirety.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. When possible, non-IOM samples will be retained for 14 days following the date of this report (unless an extension is specifically requested). IOM samples are retained for 7 days.

Current Scopes of Accreditation can be viewed at www.sgsgalson.com in the accreditations section of the "About" page.

Please contact Ex. 6 PP / Ex. 7(C) if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Ex. 6 PP / Ex. 7(C)

Enclosure(s)

Analysis Results

Liberty Mutual Industrial Hygiene Laboratory

71 Frankland Road
Hopkinton, MA 01748
(800) 230-6263 FAX: (508) 435-3575
EMail: LMIHLaboratory@LibertyMutual.com Web: www.libertymutual.com

Report Date: 9/27/2018

Ex. 6 PP / Ex. 7(C)
SGS Galson Laboratories
6601 Kirkville Rd

E Syracuse, NY 13057

Survey Date: 9/21/2018
Date Received: 9/25/2018
Customer PO: 23802
Collector: Kathryn L Drogo

Project ID: L457247
Project Number:
Project Name:
Project Location:

Sample Set: 1809201

LM Sample No.	*Sample No.*	*Analyte*	*Sampling Time (min.)*	*Sampling Rate (liters/min)*	*Volume (liters)*	*Results*
1809201-001	39069-GA1	Gallium				<0.50 ug/100 sq cm
		Gallium (ug)				<0.50 ug/sample
1809201-002	39069-GA2	Gallium				<0.50 ug/100 sq cm
		Gallium (ug)				<0.50 ug/sample
1809201-003	In-house Blank	Gallium				<0.50 ug/sample
		Gallium (ug)				<0.50 ug/sample

Analyte	Media	LOQ	Method	*Modify	Instrument	Blank Corrected	Analysis Date
Gallium	Wipe	0.50 ug/sample	OSHA ID-121	Yes	ICP	Yes	26-Sep-18
Gallium (ug)	Wipe	0.50 ug/sample	OSHA ID-121	Yes	ICP	Yes	26-Sep-18

* Modify: A "Yes" indicates a minor modification in the Method.

Analyzed by: Ex. 6 PP / Ex. 7(C)

Peer Reviewed by: Ex. 6 PP / Ex. 7(C)

Approved By: Ex. 6 PP / Ex. 7(C)

Lab Comments

A blank was not submitted with this sample set. An in-house blank was used. NIOSH and OSHA require the submission of a sample blank with each set of samples.

Laboratory Uncertainty of Measurement, at 95% confidence interval (K=2):

All samples:
Probable Bias: -0.036 ug
Analytical Uncertainty: +/- 0.013 ug

This report was revised and reissued on 9/28/2018 to correct the comment regarding the in house blank.

ILF4 Ver: 3 Approval Date: 01/07/2008 Approval By: wferro

1809201 KS/JD 9/25

GALSON LABORATORIES

6601 Kirkville Rd
East Syracuse, NY 13057-9672
Tel: 315-437-5227
888-432-LABS(5227)
Fax: 315-437-0571
www.galsonlabs.com

Liberty Mutual

Check if change of address ☐

New Client ? yes ☐ no ☐

Report To : Ex. 6 PP / Ex. 7(C)
SGS Galson Laboratory
6601 Kirkville Road
East Syracuse, NY 13057
Phone No. : Ex. 6 PP / Ex. 7(C)

Invoice To : Ex. 6 PP / Ex. 7(C)
SGS Galson Laboratory
6601 Kirkville Road
East Syracuse, NY 13057
Phone No. : Ex. 6 PP / Ex. 7(C)
Fax No. 315-437-0571

Site Name : **Project :** L457247 **Sampled By :** Client

Turnaround Time	Due Date
☐ Standard	
☐ 4 Business Days	
☐ 3 Business Days	
☑ 2 Business Days	09/27/18
☐ Next Day by 6pm	
☐ Next Day by Noon	
☐ Same day	

Verbal Authorization : 23802

Credit Card No. : Card Holder Name : Exp. :

Fax Results To : Email Only Please Fax No. : Email Only Please

Email Results To : Syracuse.Subcontracting@sgs.com

Sample Identification	Date Sampled	Collection Medium	*Air Volume (liters)/ Passive Monitors (Min)	Analysis Requested	Method Reference	Specific DL Needed
39069-GA1	9/21/2018	Wipe	100	Gallium	NIOSH 7300	
39069-GA2	9/21/2018	Wipe	100	Gallium	NIOSH 7300	
LAB BLANK	9/21/2018	Wipe	NA	Gallium	NIOSH 7300	

Comments: **RUSH* Please add lab blank.**

State/Province of sampling event:

If the method being reported is not on your laboratory's current AIHA scope of accreditation, please state that in your report.
Please provide an uncertainty statement in accordance with AIHA LQAP policy document Section 2A.5.4.3.

Chain of Custody	Print Name	Signature	Date/Time
Relinquished by :	Ex. 6 PP / Ex. 7(C)	Ex. 6 PP / Ex. 7(C)	9/24/18 1236
Received by LAB :			9/25/18

of 4 Rep 1:18

ED_005854_00000131-00123

LL457247

wipes - Ga

R41

FACS
Forensic Analytical Consulting Services

SAMPLE REQUEST FORM

Page 1 of 1

Client:	**PE21 FACS Portland** **Tetra Tech**		Sampled by: **PMW**	PM: Ex. 6 PP / Ex. 7(C)		Date: **09/21/18**	
Contact:	Ex. 6 PP / Ex. 7(C)	Phone: Ex. 6 PP / Ex. 7(C)	Special Instructions:	E-mail results to E-mail results to portland@forensicanalytical.com			
Site:	**6308 N. Marine Drive** **Portland OR**		Turnaround Time:	1-Day ☐	2-Day ☐	3-Day ☐	5-Day ☐	Other ☒	Due Date and Time: **Due By 14:00 on 9/25**
Client No.:	**C3467**	**FACS Job #:** **PJ39069**	Analysis:	Ga (wipe)					

Sample Number	Sample Location	Component/Surface	Area	Type	Color
39069 - Ga1	Waste Water Neutralization Room, Adj (~8') to w Entrance (m11)	Floor	100cm²	WIPE	Brown Residue
39069 - Ga2	Waste water Neutralization Room, Adj Cd/Se waste tanks (m14)	Floor	100cm²	WIPE	white + Brown crusty Residue

WIPE NG

SK 9/24/18

773300277422
Date:09/24/18
Shipper:FEDEX
Initials:MAK
Prep:UNKNOWN

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☒ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: Ex. 6 PP / Ex. 7(C)	*Date & Time:* 9/22/18 13:45	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:* Ex. 6 PP / Ex. 7(C)	*Date & Time:* 9/24/18 Condition Acceptable ☑ Yes ☐ No

SGS GALSON

Ex. 6 PP / Ex. 7(C)

September 25, 2018

DOH ELAP #11626
AIHA-LAP #100324

Account# 23802

Login# L457249

Dear Ex. 6 PP / Ex. 7(C)

Enclosed are the analytical results for the samples received by our laboratory on September 24, 2018. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. When possible, non-IOM samples will be retained for 14 days following the date of this report (unless an extension is specifically requested). IOM samples are retained for 7 days.

Current Scopes of Accreditation can be viewed at www.sgsgalson.com in the accreditations section of the "About" page.

Please contact Ex. 6 PP / Ex. 7(C) if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Ex. 6 PP / Ex. 7(C)

Enclosure(s)

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Forensic Analytical Lab Compto
Site : 6308 N. Marine Drive Portland
Project No. : PJ39069
Date Sampled : NS
Date Received : 24-SEP-18

Account No.: 23802
Login No. : L457249
Date Analyzed : 24-SEP-18 - 25-SEP-18
Report ID : 1091966

Indium

Sample ID	Lab ID	Area cm2	Total ug	Conc ug/cm2
39069-IN1	L457249-1	100	21	0.21
39069-IN2	L457249-2	100	28	0.28
39069-IN3	L457249-3	100	10	0.10
39069-IN4	L457249-4	100	44	0.44
39069-IN5	L457249-5	100	180	1.8

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.8 ug
Analytical Method : mod NIOSH 7303/mod OSHA ID-125G; ICP/M
Collection Media : MCE Wipe

Submitted by: JMR
Date : 25-SEP-18
Supervisor : KEG

Approved by: KEG
NYS DOH # : 11626
QC by : KEG

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms NA -Not Applicable ND -Not Detected
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ppm -Parts per Million

GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Forensic Analytical Lab Compton
Site : 6308 N. Marine Drive Portland
Project No. : PJ39069

Date Sampled :
Date Received: 24-SEP-18
Date Analyzed: 24-SEP-18 - 25-SEP-18

Account No.: 23802
Login No. : L457249

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceeding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L457249 (Report ID: 1091966):
Reported results reflect elemental analysis of the requested metals. Certain compounds may not be solubilized during digestion, resulting in data that is biased low.
SOPs: MT-SOP-28(1), MT-SOP-29(3)

<	-Less Than	mg	-Milligrams	m3	-Cubic Meters	kg	-Kilograms	ppm	-Parts per Million
>	-Greater Than	ug	-Micrograms	l	-Liters	NS	-Not Specified	ND	-Not Detected	NA	-Not Applicable

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Forensic Analytical Lab Compton
Site : 6308 N. Marine Drive Portland
Project No. : PJ39069

Date Sampled :
Date Received: 24-SEP-18
Date Analyzed: 24-SEP-18 - 25-SEP-18

Account No.: 23802
Login No. : L457249

L457249 (Report ID: 1091966):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Indium	N/A	N/A

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

L457249

FACS

Wipes - In

SAMPLE REQUEST FORM

R40

Client:	**PE21 FACS Portland** **Tetra Tech**	Sampled by: **PMW** PM: Ex. 6 PP / Ex. 7(C)	Date: **09/21/18**
Contact: Ex. 6 PP / Ex. 7(C)	Phone: Ex. 6 PP / Ex. 7(C)	Special Instructions:	E-mail results to E-mail results to portland@forensicanalytical.com
Site:	**6308 N. Marine Drive** **Portland OR**	Turnaround Time:	1-Day ☐ 2-Day ☐ 3-Day ☐ 5-Day ☐ Other ☒ — Due Date and Time: **Due By 14:00 on 9/25**
Client No.: **C3467**	**FACS Job #: PJ39069**	Analysis:	In (wipe)

Sample Number	Sample Location	Component/Surface	Area	Type	Color
39069-In1	Plating Room, Adj (~5') to NW Entry Door (M01)	Floor	100cm²	WIPE	Red-Brown Residue
39069-In2	Plating Room, Adj (~5') to SW Entry Door (M06)	Floor	100cm²	WIPE	Red-Brown Residue
39069-In3	Waste Water Neutralization Room, Adj (~3') to W Entrance (M11)	Floor	100cm²	WIPE	Brown Residue
39069-In4	Waste water Neutralization Room, Adj Cd, Se Waste tanks (M14)	Floor	100cm²	WIPE	White + Brown crusty Residue
39069-In5	Plating Room, N Area, between 2 Haz. chem. containers Labled "Indium Chloride" (M02)	Floor	100cm²	WIPE	Silvery purple, Lustrous Gel-like

filter at wipes

SR 9/24/18

773300277422
Date:09/24/18
Shipper:FEDEX
Initials:MAK
Prep:UNKNOWN

Substrate: wood metal concrete plaster drywall brick

Shipped via: ☒ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: Ex. 6 PP / Ex. 7(C)	*Date & Time:* 9/22/18 13:45	*Received by:*	*Date & Time:* Condition Acceptable ☐ Yes ☐ No
Relinquished by:	*Date & Time:*	*Received by:* Ex. 6 PP / Ex. 7(C)	*Date & Time:* 9/24/18 0941 Condition Acceptable ☒ Yes ☐ No

Appendix E
Equipment Calibration Documents

ThermoFisher SCIENTIFIC

The world leader in serving science

SAPPHIRE CALIBRATION VERIFICATION

DATE: 29-Sep-17 **TEMP:** Ambient

PRESSURE: 760 mm Hg

CUSTOMER: Pine Environmental

SET NAME: STD LIB

SERIAL #: 80234

SALES ORDER #: SE-1709218508

SCIENTIST III : **Ex. 6 PP / Ex. 7(C)**

Nitrous Oxide
(N2O)
Range: 0 - 100 ppm
Wavelength: 4.5 um

Injection Volume (ul)	Actual Conc. (ppm)	Meter Reading (ppm)	%Error Reading
200	88.9	80.8	-9.1

Sulfur Hexaflouride
(SF6)
Range: 0 - 4 ppm
Wavelength: 10.708 um

Injection Setting	Actual Conc. (ppm)	Meter Reading (ppm)	%Error Reading
1	3.0	2.6	-13.0

Environmental & Process Monitoring
Environmental & Process Instruments
27 Forge Parkway
Franklin, MA 02038
(508) 520-0430
(508) 520-2800 fax
www.thermofisher.com

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
12524 130th Lane NE Unit A 114
Kirkland WA 98034
425-285-9102

Pine Environmental Services, Inc.

Instrument ID 14635
Description MIRAN SapphIRe Ambient Air Analyzer
Calibrated 8/13/2018 12:08:30PM

Manufacturer Thermo
Model Number 205B-XL2A3S
Serial Number/ Lot Number 205B-80234-460
Location Seattle
Department

State Certified
Status Pass
Temp °C 25
Humidity % 45

Calibration Specifications

Group # 1
Group Name Particulate Filter
Test Performed: N/A **As Found Result:** **As Left Result:**

Test Instruments Used During the Calibration

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	(As Of Cal Entry Date) Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Ex. 6 PP / Ex. 7(C)

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

Right People
Right Perspective
Right Now

www.forensicanalytical.com

APPENDIX C
HEALTH AND SAFETY PLAN

TETRA TECH

HEALTH AND SAFETY PLAN

Former SoloPower, Systems, Inc. Facility
6308-6310 North Marine Drive
Portland, Oregon 97203

Tetra Tech Project No. T24396.036A

9 November 2018

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APPROVED

Ex. 6 PP / Ex. 7(C)

9 November 2018
Date

Ex. 6 PP / Ex. 7(C)

9 November 2018
Date

Table of Contents

FIGURES

APPENDICES

1.0 INTRODUCTION

This document presents the Site-specific health and safety requirements that are intended to guide field oversight activities at the former SoloPower Systems, Inc. (SoloPower) facility (Site) located at 6308-6310 North Marine Drive in Portland, Oregon 92703 (Site building). This health and safety plan (HASP) must be present at the Site during the performance of all Site activities and will be available to all on-Site personnel who may be exposed to hazardous on-Site conditions, including Tetra Tech and subcontractor personnel participating in Site operations, and all authorized Site visitors, including regulatory agency representatives. All on-Site personnel, including Tetra Tech and subcontractor employees and Site visitors, must be informed of Site emergency response procedures and any potential health and safety hazards associated with on-Site activities.

Subcontractor personnel participating in project operations will be required to read and comply with all sections of this HASP. All subcontractor personnel entering the Site must sign the Compliance Agreement form (**Appendix A**). Subcontractor personnel must comply with all applicable 29 Code of Federal Regulations (CFR) 1910.120 training, respirator fit testing, and medical surveillance requirements and other applicable United States Department of Labor, Occupational Safety and Health Administration (OSHA) General Industry and Construction Standards (29 CFR Part 1926). Subcontractors are responsible for providing personal protective equipment (PPE) required by this HASP for their personnel and are directly responsible for the health and safety of their employees. Subcontractors will prepare a safety plan and/or Job Safety Analysis (JSA) for their work assignments which is to be submitted to Tetra Tech for review prior to the commencement of subcontractor activities at the Site.

SoloPower was a tenant that manufactured solar panels. The manufacturing process involved the use of hazardous materials and generation of hazardous waste (collectively, hazardous substances). SoloPower now has ceased operations at the Site building, and vacated the facility leaving behind numerous containers and areas of deposited hazardous substances (residuum). This document has been prepared for implementation during removal of hazardous substances and manufacturing equipment from the SoloPower facility.

2.0 KEY PROJECT PERSONNEL

Personnel responsible for project safety are the Project Manager, Field Supervisor, and the Project Health & Safety Manager.

The Project Manager has ultimate responsibility for implementation of the requirements set forth in this HASP. Some of this responsibility may be achieved through delegation to Site-dedicated personnel that report directly to the Project Manager. The Project Manager shall regularly confer with Site personnel regarding safety and health performance.

The Tetra Tech Field Supervisor will oversee and direct field activities and has day-to-day responsibility for HASP implementation. Subcontractor compliance with the HASP shall be monitored by the Field Supervisor. The Field Supervisor will report directly to the Project Manager any health and safety-related issues.

The Project Health & Safety Manager is responsible for review of the project HASP, and will also act in an advisory capacity to the Project Manager and Site personnel for project-specific health and safety issues. Responsibilities include:

- Provide information regarding Site contaminants and physical and biological hazards.
- Assign PPE based on task and potential hazards.
- Establish emergency action procedures.
- Stipulate training and medical surveillance requirements.
- Modify this HASP, where and when necessary.

Every Tetra Tech employee has the right to stop work if he/she feels any worksite condition, practice, or operation causes or presents a hazard that can reasonably be expected to result in immediate death, serious physical harm, or severe damage to the environment. Through observations and communication, all parties involved will then develop, communicate, and implement the corrective actions necessary and appropriate to modify the task and to resume work. The stop work event will be reported as a near miss incident.

All authorized Site visitors will be required to read the HASP and sign the Compliance Agreement form (**Appendix A**). Visitors will be expected to comply with relevant OSHA requirements. Visitors will also be expected to provide their own PPE required by the HASP. Visitors who have not met OSHA training, medical surveillance, and PPE requirements are not permitted to enter work zones where exposure to health and safety hazards is possible.

3.0 WORK DESCRIPTION

Tetra Tech will provide oversight of the following planned, sequential tasks at the Site. These tasks will be performed by its subcontractor Clean Harbors, Inc. (CHI), possibly other subcontractors, and those acquiring or otherwise disposing of manufacturing equipment:

1. Remove Hazardous Substances (Including Residuum) and Their Containers from the Impacted Rooms (to be performed by CHI).
2. Remove Hazardous Substances from Remaining SoloPower Facility Areas and Remove Ductwork from Manufacturing Equipment (to be performed by a yet-to-be-selected subcontractor under contract to the Site Owner or Site Owner's representative).
3. Manufacturing Equipment Disposition (to be performed by those acquiring or otherwise disposing of manufacturing equipment).

The impacted rooms include the former cadmium sulfate deposition (CAD) room, wastewater neutralization (WWAN) room, and the plating (PLAT) room. These rooms and the remaining SoloPower facility areas area shown on Figures 1 and 2. For Task 1 the work zone includes the CAD, WWAN, and PLAT rooms and adjacent areas needed by CHI for staging equipment and vehicles. For Task 2, the work zone includes the maintenance area, manufacturing area, warehouse area, additional rooms manufacturing area, and exterior enclosures (collectively the non-impacted areas), along with adjacent areas needed by the hazardous substances removal subcontractor for staging equipment and vehicles. For Task 3, the work zone is the impacted rooms (which have been decontaminated) and the non-impacted areas (essentially all of the non-office areas of the Site building and the exterior enclosures).

Upon completion of Task 1 by CHI, Tetra Tech or its subconsultant, Forensic Analytical Consulting Services, Inc. (FACS), will perform the following tasks in the impacted rooms:

- Visual inspection of remediated areas, equipment and surfaces.
- Post-remedial surface wipe and air sampling with rush analysis for the target analytes.
- Verbal and written notification to client that all Site facility clearance criteria have been met and the CAD, WWAN, and PLAT rooms are cleared for (1) entry without Level C PPE and (2) re-use.

Upon completion of Task 2, Tetra Tech or its subconsultant, FACS, will perform the following tasks in the remaining areas of the Site building:

- Visual inspection of remediated areas, equipment and surfaces.
- Post-remedial surface wipe sampling of equipment-related ductwork (as judged necessary) with rush analysis for the target analytes.
- Verbal and written notification to Site Owner's representative that all hazardous substances have been removed from the Site building, with the possible exception of hazardous substances in manufacturing equipment.

Upon completion of Task 3 Tetra Tech or the Site Owner's representative will perform the following tasks in the Site building:

- Visual inspection of the Site building.
- Verbal and written notification to the Site Owner that all equipment (including any that may contain hazardous substances) has been removed and, if any spillage of hazardous substances took place, that the spilled hazardous substance has been remediated with the appropriate documentation that clearance standards have been met.

- Verbal and written notification to the Site Owner that all known SoloPower manufacturing related hazardous substances and equipment have been removed from the Site, and that the Site building is cleared for re-use as an industrial or warehouse facility.

4.0 HAZARD ASSESSMENT

The following subsections include potential hazards that may be present at the Site or created as a result of the operations being conducted at the Site.

4.1 Confined Spaces

Tetra Tech policy **prohibits unauthorized entry into confined spaces.** Tetra Tech and subcontractor personnel are not allowed, under any circumstances, to enter identified or potential confined spaces without having appropriate training, supervision, safety equipment, and calibrated air monitoring equipment in accordance with the Tetra Tech Confined Space Entry Program and the new OSHA Confined Space Entry Standard for Construction (29 CFR Part 1926.1200-1213). Any entry of a confined space by subcontractor personnel must be pre-approved by the subcontractor's corporate health and safety director (or designee) and the Tetra Tech Project Health & Safety Manager based on review and approval of qualifications (education, experience, demonstration of knowledge and competency).

A confined space is defined as an area which has the following characteristics:

- Is large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit (for example, tanks (including aboveground storage tanks [ASTs]), manholes, sewers, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry).
- Is not designed for continuous employee occupancy.

Additionally, a Permit-Required Confined Space must also have one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere.
- Contains a material that has the potential for engulfing an entrant.
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly caving walls or by a floor that slopes downward and tapers to a smaller cross-section.
- Contains any other recognized, serious, safety or health hazard.

Identified confined spaces at the Site include, but may not be limited to, sewer and storm water manholes, tanks, large ductwork and plenums.

It is not anticipated, under the proposed scope of work, that confined space and permit-required confined space activities will be conducted. **Therefore, Tetra Tech and subcontractor personnel under the provisions of this HASP are not allowed, under any circumstances, to enter confined spaces**. Entry is defined as breaking the plane of the opening to the confined space with any body part.

However, should future work require confined space entry, Tetra Tech will modify the project HASP to specify the equipment or building structure to be entered, the purpose of the confined space entry, the confined space classification (permit or non-permit), hazards posed by the confined space, and the subcontractor health and safety requirements for performing confined space entry. Tetra Tech will review the subcontractor confined space entry program and permit form, example of a completed permit for a similar structure, training qualifications for the designated role each subcontractor employee will play in the entry operation (i.e., attendant, entrant, supervisor, or rescue), rescue plan, air monitoring procedures and calibration, and JSA for the planned task. Subcontractor confined space entry operations must be pre-approved by the Tetra Tech Project Health & Safety Manager in writing.

4.2 Chemical Hazards

According to information available to date, the primary chemical compounds of concern that may be encountered during hazardous substances removal are:

Cadmium sulfate deposition (CAD) Room:

Hazardous Materials: Thiourea powder, cadmium sulfate ($CdSO_4$), ammonium hydroxide (NH_4OH), sulfuric acid (H_2SO_4), hydrochloric acid (HCl), caustic soda, sodium hypochlorite, Thiourea/nicad sulfate mix.

Hazardous Waste: Waste indium.

Wastewater neutralization (WWAN) Room:

Hazardous Materials: Copper (Cu) solution, copper sulfate ($CuSO_4$), hydraulic oil, liquid caustic soda, H_2SO_4, ammonia solution, Thio-Red (polycarbonate), indium trioxide (InO_3), $CuSO_4$- H_2SO_4 solution, acetone, and acid neutralizer.

Hazardous Waste: Waste ammonia solution and selenium wastewater.

Plating (PLAT) Room:

Hazardous Materials: Sodium hydroxide (NaOH), sodium gallate, indium solution, hydrogen peroxide (H_2O_2), selenious-sodium selenite solution, selenium (Se), H_2SO_4, indium trioxide (InO_3), muriatic acid, gallium (Ga) plating solution.

Hazardous Waste: Waste Ga, In, and Se.

Specific information on potential chemical hazards in the CAD, WWAN, and PLAT rooms is provided in **Table 4-2**, including exposure limits, anticipated exposure routes, and toxic effects. Potential routes of exposure include dermal (skin and eye) contact and absorption, inhalation, and ingestion. Dermal contact and accidental ingestion can occur through improper decontamination or PPE usage. Inhalation can occur if airborne contaminants (either vapors or dusts) are generated or released during Site activities. The chemicals may also contaminate equipment, vehicles, instruments, and personnel.

TABLE 4.2 – POTENTIAL CHEMICAL HAZARDS IN THE CAD, WWAN, AND PLAT ROOMS

CHEMICAL	ROUTES OF ENTRY	EXPOSURE LIMITS	TOXIC EFFECTS
Cadmium (see 29 CFR Parts 1910.1027 and 1926.1127)	Inhalation Ingestion	PEL: 5 µg/m^3	Respiratory tract, kidney damage
Gallium	Inhalation, Ingestion	NL	Lower respiratory tract irritation
Indium	Inhalation, Ingestion, Dermal	TLV: 0.1 mg/m^3	Lungs, eyes, skin liver, kidneys, heart
Selenium	Inhalation, Ingestion, Dermal	PEL/TLV/REL: 0.2 mg/m^3	Eye/upper respiratory tract irritant
Sulfur dioxide	Inhalation, Dermal	PEL: 5 ppm TLV-STEL: 0.25 ppm REL: 2 ppm	Eyes, skin, respiratory tract irritation
Ammonia	Inhalation Ingestion Skin/eye contact	PEL: 50 ppm TLV/REL: 25 ppm STEL: 35 ppm	Eye/skin/respiratory tract irritant

Notes:

$\mu g/m^3$	=	micrograms per cubic meter.
mg/m^3	=	milligrams per cubic meter.
ppm	=	Parts per million. REL = Recommended Exposure Limit (NIOSH recommended value, expressed as 10-hour TWA).
STEL	=	Short-term exposure limit.
TLV	=	Threshold Limit Value (2018 American Conference of Governmental Industrial Hygienists' recommended values, expressed as 8-hour TWA).
TWA	=	Time-Weighted Average concentration for a normal 8-hour work day and a 40-hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.
OSHA	=	Occupational Safety and Health Administration (United States Department of Labor).
PEL	=	Permissible Exposure Limit (expressed as 8-hour time-weighted average [TWA]).
NL	=	Not listed

4.4 Physical Hazards

Physical hazards associated with Site activities present a potential threat to on-Site personnel. The following physical hazards may be present during the performance of Site activities:

- Excessive noise (> 85 decibels [dBA])
- Slips, trips, and falls
- Traffic and heavy equipment hazards
- Manual lifting/material handling
- Pinch/compression points
- Suspended loads

Tetra Tech personnel will remain outside the active work zones and designated vehicle traffic pathways to minimize the risk of physical injury.

5.0 GENERAL HEALTH AND SAFETY REQUIREMENTS

5.1 HAZWOPER and OSHA Training

All on-Site personnel who may be exposed to hazardous conditions, including Tetra Tech and subcontractor personnel and site visitors who will participate in on-Site activities, will be required to meet training requirements outlined in 29 CFR Part 1910.120, "Hazardous Waste Operations and Emergency Response." All general site workers must have completed the 40-hour initial HAZWOPER training. All Site personnel must have current 8-hour HAZWOPER annual refresher training. Evidence of equivalent training including cadmium and other contaminant hazard communication training, PPE, respiratory protection, decontamination, etc. may be accepted by Tetra Tech's CIH for the post-remedial inspection task. At least one Site person must be current in basic first aid, CPR and bloodborne pathogens (29 CFR Part 1910.1030). All Tetra Tech site personnel have received the updated hazard communication/Globally Harmonized System (GHS) training as of the December 1, 2013 OSHA due date.

5.2 Site-Specific Orientation

Tetra Tech will provide Site-specific orientation to all Tetra Tech and subcontractor personnel who will perform work at the Site. All personnel and visitors entering the non-office areas of the Site building will be required to review this HASP and sign the Compliance Agreement form. Site-specific orientation will include a review of the:

- Contents of this HASP.
- Emergency response procedures (evacuation and assembly points).
- Names of designated personnel responsible for site health and safety.
- Site and operation hazards and required controls.
- PPE requirements.
- Spill response procedures.
- Review of the contents of relevant safety data sheets (SDSs).

5.3 Medical Surveillance

All Tetra Tech and subcontractor personnel involved in on-Site activities must participate in a medical surveillance program as required by 29 CFR Part 1910.120(f). Tetra Tech has established an employee medical surveillance program with WorkCare, Inc., of Orange, California. Employee Hazardous Waste Operations and Emergency Response (HAZWOPER) medical clearance and respirator clearance reports are maintained at the Corporate Health and Safety office and by the Tetra Tech Irvine, CA office health & safety coordinator (for employees of that office). Subcontractors must provide evidence of current medical and respirator clearance for their employees who perform Task 1 activities (as described in Section 3). Subcontractors must also provide proof of current valid respirator fit test within the prior 12 months for the same brand and model of respirator to be worn at the Site.

5.4 Personal Protective Equipment and Clothing

The level of personal protection to be used for oversight of subcontractor work tasks at the Site have been selected based on known or anticipated physical hazards and the unlikely event that contact with hazardous substances in the work zones will occur.

Modified Level D PPE is the minimum acceptable level required for routine work at the Site, which includes the following items:

- Standard work clothes – long sleeves, long pants or coveralls.
- Leather work gloves (optional)
- Chemical-resistant gloves: nitrile (for inspection of drums/containers).
- Safety boots with steel toe protection.
- Disposable boot covers or chemical-resistant outer boots (optional).
- Safety glasses with side shields or goggles.
- Hard hat.
- American National Standards Institute (ANSI) Class 2 or better high-visibility safety vest (around heavy equipment/traffic).
- Hearing protection (ear plugs with minimum 25 dB noise reduction rating)

Personnel must maintain proficiency in the use and care of PPE that is to be worn. Only PPE that meets the following ANSI standards are to be worn:

- Eye protection – ANSI/ISEA Z87.1-2010
- Head protection – ANSI Z89.1-2009
- Foot protection – ANSI Z41-1999 or ASTM F-2412-2005

6.0 EMERGENCY RESPONSE PROCEDURES

6.1 Emergency Planning

Equipment to be Available On-Site

- Ear plugs
- First aid kit that meets the ANSI Z308.1-1998 standard.
- Fire extinguisher, minimum 10-pound ABC rating.
- Construction tape and barriers to delineate restricted access work zone.
- NO SMOKING signs (optional).
- Water and soap for washing (at facility).
- A vehicle with keys in the ignition and headed in a direction for quick departure for the transport of slightly injured personnel to the hospital must be kept on-Site when personnel are working. Severely injured personnel MUST be transported ONLY by paramedics (except as permitted in Subsection 6.1). A copy of the hospital address, route directions, and map showing route to the hospital (Subsection 6.6) must remain in the vehicle.

6.2 Physical Injury

In the event of an accident resulting in physical injury, call 911 immediately and perform first aid commensurate with training and seriousness of the injury only in the event of a life-threatening injury. Severely injured personnel are to be transported only by emergency service personnel and/or by ambulance personnel, unless a life-threatening condition that must be addressed immediately is judged to exist. If emergency or ambulance personnel transport injured personnel to the hospital, the hospital will be selected at the discretion of the emergency or ambulance personnel. The hospital selected may or may not be the hospital listed in Subsection 6.6 of this HASP. At the hospital, a physician's attention is mandatory regardless of how serious the injury appears.

Workers who are ill or who have suffered a non-serious injury may be transported by site personnel to nearby medical facilities, provided that such transport does not aggravate or further endanger the welfare of the injured/ill person.

For non-life-threatening incidents (e.g., muscle strains and sprains, and minor lacerations), personnel are encouraged to contact Work Care Incident Intervention **(888-449-7787)** for guidance on first aid and medical treatment. Work Care may direct the affected employee to the Zurich-authorized medical clinic/physician for further evaluation of a work-related injury or illness. **The authorized doctor offices or clinics have agreed to accept workers compensation patients without an appointment.** Information for the clinic nearest to the Site is provided below:

Concentra Medical Center
3449 N. Anchor Street, Suite 300a
Portland, OR 97217
Phone: (503) 283-0013

The route and directions to the occupational health clinic are shown after Section 6.7.

The Project Health and Safety Manager and the Project Manager are to be notified by the Tetra Tech Field Supervisor (or Field Inspector or other personnel if the Tetra Tech Field Supervisor is not present or incapacitated), as soon after the injury as practical, regarding the nature of the accident. A written report is also to be prepared and submitted by the Field Supervisor or Field Inspector to the Project Health and Safety Manager within 24 hours of the accident. If the Field Supervisor or Field Inspector is unable to make the report (due to injury), an individual designated by the Project Health and Safety Manager shall make the report.

Project personnel are required to report all serious near misses, injuries, illnesses, spills, releases, fires, explosions, equipment or property damage, and motor vehicle accidents to the Project Manager. The Project Manager must be notified of any on-Site emergencies and is responsible for seeing that the appropriate emergency procedures described in this section are followed.

6.3 Fire, Explosion, and Property Damage

In the event of a fire or explosion, notify the fire department immediately by dialing 911.

The Project Health and Safety Manager and the Project Manager are to be notified as soon as practical and a written report prepared within 24 hours of the accident.

In the event of any accident involving serious injury of sufficient magnitude, work at the Site shall cease until the Project Health and Safety Manager (or a designee) has completed a review of the events and Site conditions and has authorized work to resume.

6.4 Emergency Telephone Numbers

Fire Department, Police Department, and Paramedics: 911

6.5 Work Site Address

Former SoloPower Facility
6308-6310 North Marine Drive, Portland, OR 97203
Project Manager: Steven Grod's Mobile Phone: (949) 542-2869

6.6 Hospital Address and Route

Legacy Emanuel Medical Center
2801 North Gantenbein Avenue, Portland, OR 97227
Phone: (503) 413-2200
See map route and driving directions on following page.

6.7 Workers Compensation Clinic

Concentra Medical Center
3449 North Anchor Street, Suite 300a, Portland, OR 97217
Phone: (503) 283-0013
See map route and driving directions on following page.

6308 N Marine Dr
Portland, OR 97203

Get on I-5 S

6 min (3.5 mi)

1. Head southeast on N Marine Dr — 3.2 mi
2. Turn right to merge onto I-5 S — 0.4 mi

Follow I-5 S to N Broadway. Take exit 302A from I-5 S

6 min (4.8 mi)

3. Merge onto I-5 S — 4.6 mi
4. Use the right lane to take exit 302A toward City Center — 0.2 mi

Take N Flint Ave and N Kerby Ave to N Gantenbein Ave

4 min (0.8 mi)

5. Merge onto N Broadway — 118 ft
6. Turn right onto N Flint Ave — 0.4 mi
7. Turn left onto N Russell St — 0.1 mi
8. Slight right onto N Kerby Ave — 0.1 mi
9. Turn right onto N Graham St — 0.1 mi
10. Turn left onto N Gantenbein Ave — 184 ft

2801 N Gantenbein Ave
Portland, OR 97227

6308 N Marine Dr

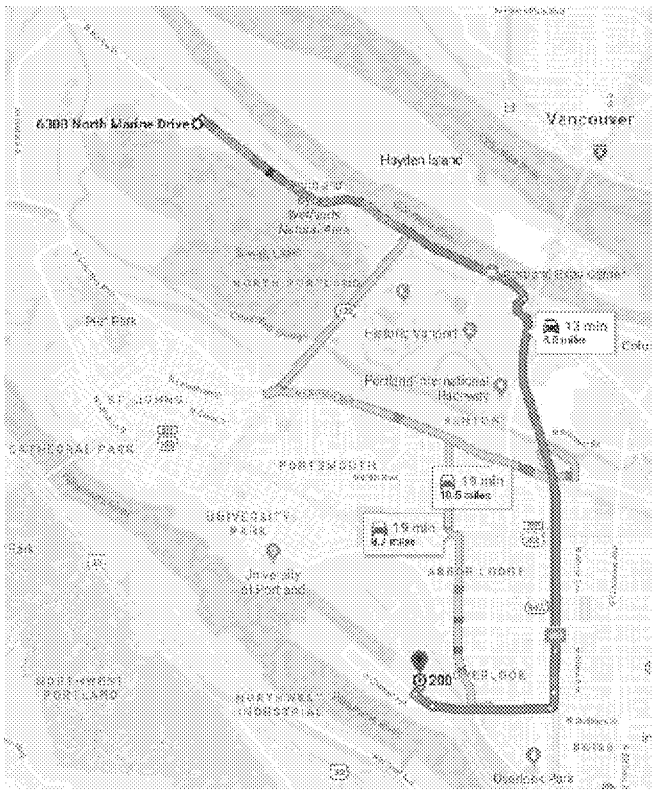
Portland, OR 97203

Take N Marine Dr and I-5 S to N Anchor St — 13 min (7.9 mi)

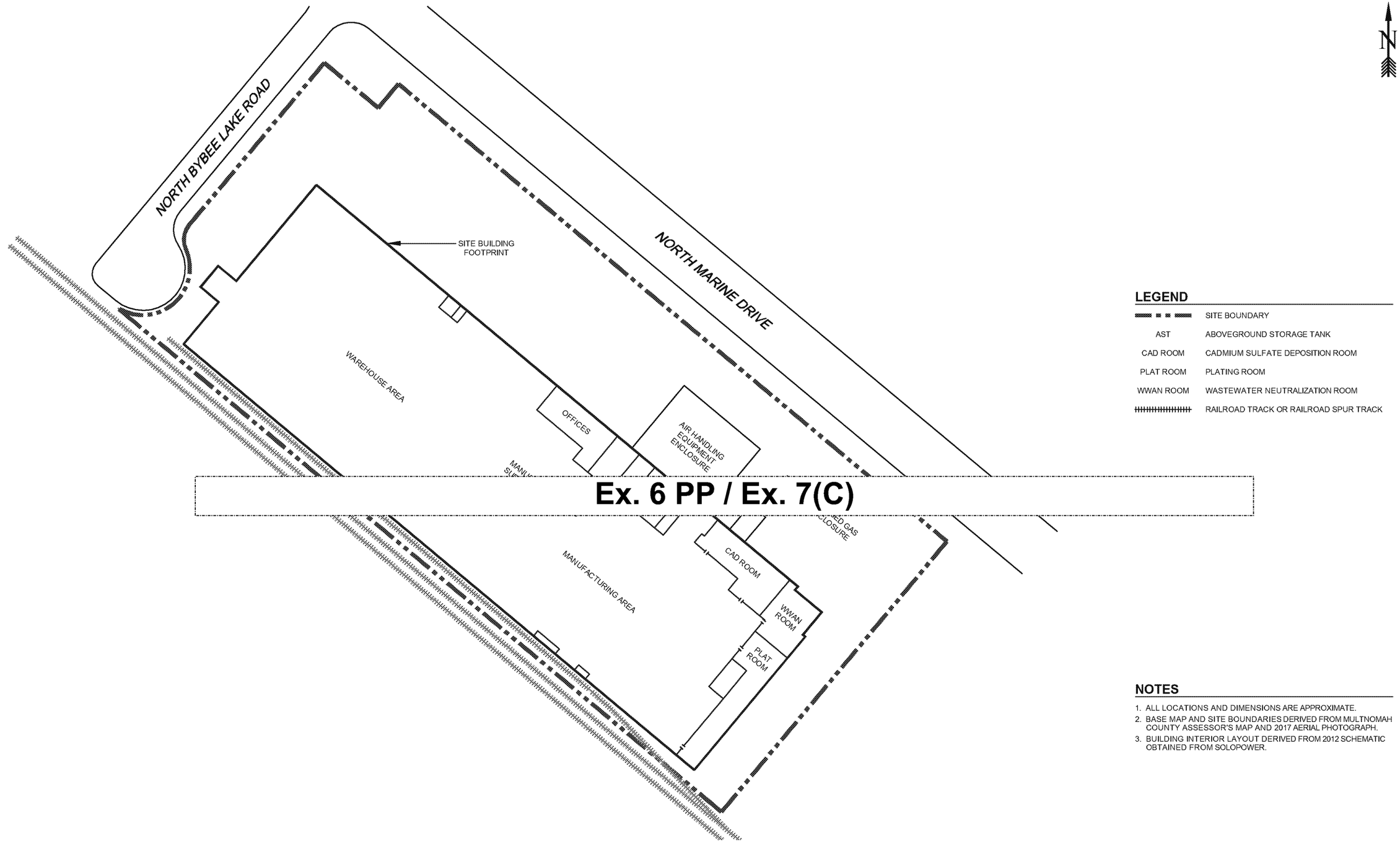
1. Head southeast on N Marine Dr — 3.2 mi
2. Turn right to merge onto I-5 S — 3.1 mi
3. Take exit 303 toward Alberta St/Swan Island — 0.4 mi
4. Keep right to continue toward N Going St — 0.1 mi
5. Slight right onto N Going St — 1.0 mi

   ⚠ Parts of this road may be closed at certain times or days
6. Continue onto N Lagoon Ave — 0.2 mi

Continue on N Anchor St to your destination — 53 s (0.1 mi)



FIGURES



LEGEND

	SITE BOUNDARY
AST	ABOVEGROUND STORAGE TANK
CAD ROOM	CADMIUM SULFATE DEPOSITION ROOM
PLAT ROOM	PLATING ROOM
WWAN ROOM	WASTEWATER NEUTRALIZATION ROOM
	RAILROAD TRACK OR RAILROAD SPUR TRACK

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. BASE MAP AND SITE BOUNDARIES DERIVED FROM MULTNOMAH COUNTY ASSESSOR'S MAP AND 2017 AERIAL PHOTOGRAPH.
3. BUILDING INTERIOR LAYOUT DERIVED FROM 2012 SCHEMATIC OBTAINED FROM SOLOPOWER.

0 120 240

SCALE (FEET)

MARINE DRIVE DISTRIBUTION CENTER I
FORMER SOLOPOWER, INC. FACILITY
6308 NORTH MARINE DRIVE
PORTLAND, OREGON 97203

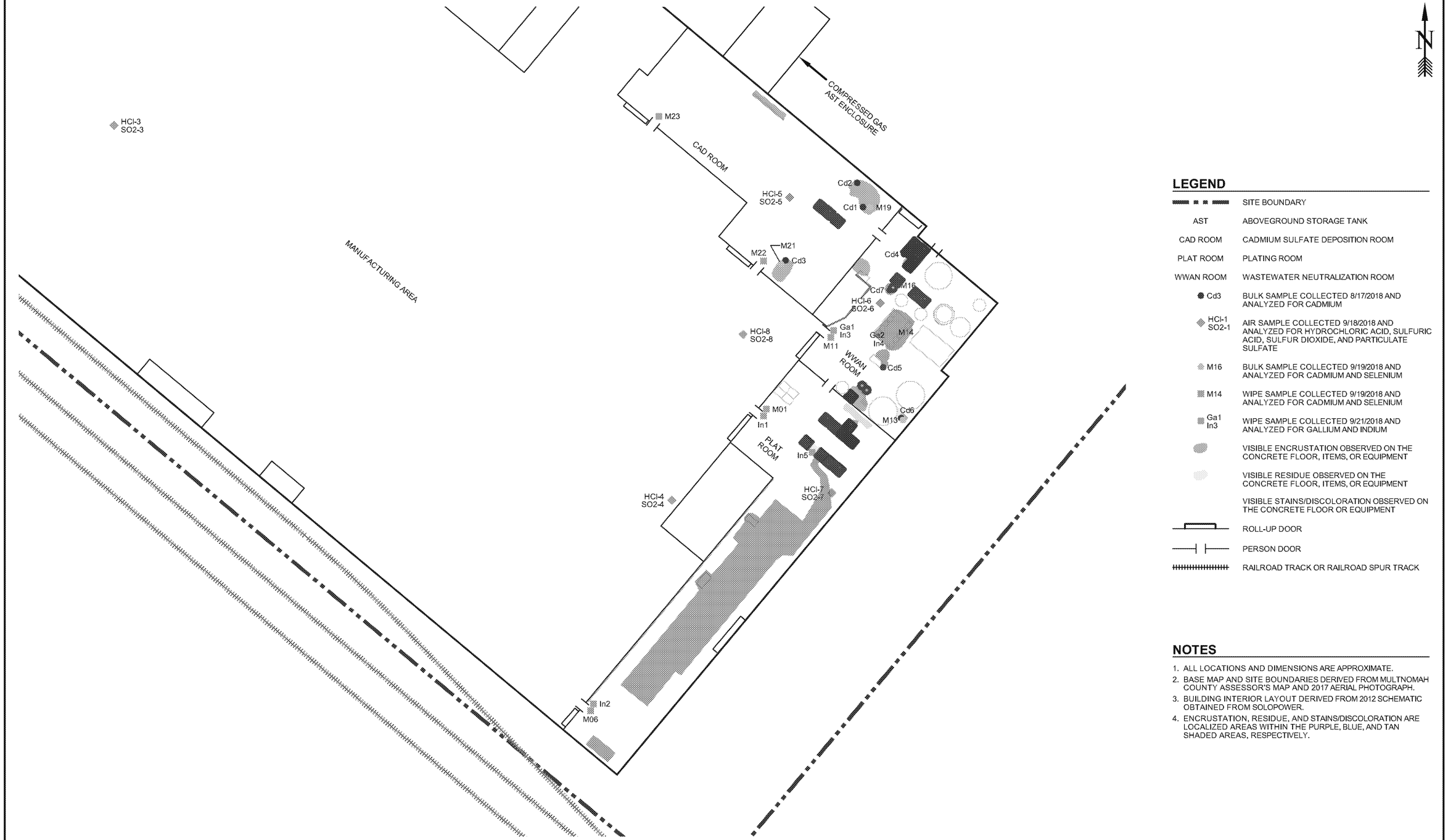
TETRA TECH

NOVEMBER 9, 2018

TETRA TECH PROJ. NO. T24396.036A

SITE MAP

FIGURE 1



LEGEND

	SITE BOUNDARY
AST	ABOVEGROUND STORAGE TANK
CAD ROOM	CADMIUM SULFATE DEPOSITION ROOM
PLAT ROOM	PLATING ROOM
WWAN ROOM	WASTEWATER NEUTRALIZATION ROOM
Cd3	BULK SAMPLE COLLECTED 8/17/2018 AND ANALYZED FOR CADMIUM
HCl-1 SO2-1	AIR SAMPLE COLLECTED 9/18/2018 AND ANALYZED FOR HYDROCHLORIC ACID, SULFURIC ACID, SULFUR DIOXIDE, AND PARTICULATE SULFATE
M16	BULK SAMPLE COLLECTED 9/19/2018 AND ANALYZED FOR CADMIUM AND SELENIUM
M14	WIPE SAMPLE COLLECTED 9/19/2018 AND ANALYZED FOR CADMIUM AND SELENIUM
Ga1 In3	WIPE SAMPLE COLLECTED 9/21/2018 AND ANALYZED FOR GALLIUM AND INDIUM
	VISIBLE ENCRUSTATION OBSERVED ON THE CONCRETE FLOOR, ITEMS, OR EQUIPMENT
	VISIBLE RESIDUE OBSERVED ON THE CONCRETE FLOOR, ITEMS, OR EQUIPMENT
	VISIBLE STAINS/DISCOLORATION OBSERVED ON THE CONCRETE FLOOR OR EQUIPMENT
	ROLL-UP DOOR
	PERSON DOOR
	RAILROAD TRACK OR RAILROAD SPUR TRACK

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. BASE MAP AND SITE BOUNDARIES DERIVED FROM MULTNOMAH COUNTY ASSESSOR'S MAP AND 2017 AERIAL PHOTOGRAPH.
3. BUILDING INTERIOR LAYOUT DERIVED FROM 2012 SCHEMATIC OBTAINED FROM SOLOPOWER.
4. ENCRUSTATION, RESIDUE, AND STAINS/DISCOLORATION ARE LOCALIZED AREAS WITHIN THE PURPLE, BLUE, AND TAN SHADED AREAS, RESPECTIVELY.

MARINE DRIVE DISTRIBUTION CENTER I
FORMER SOLOPOWER, INC. FACILITY
6308 NORTH MARINE DRIVE
PORTLAND, OREGON 97203

OCTOBER 9, 2018

TETRA TECH PROJ. NO. T24396.036A

IMPACTED ROOMS MAP

FIGURE 2

APPENDIX A

HEALTH AND SAFETY COMPLIANCE AGREEMENT

HEALTH AND SAFETY COMPLIANCE AGREEMENT

Tetra Tech, Inc.

Project Number: T24396.036A

I, _____, have received a copy of the entire Health and Safety Plan for the above-referenced project. I have read the Plan, understand it, and agree to comply with all of the health and safety requirements. I understand that I may be prohibited from working on the project for violating any of the requirements.

I have been approved to wear a respirator by a physician based on medical examination. I have been trained in the appropriate use, care, and storage of respiratory equipment. I have been respirator fit-tested, and I will have my respirator available for use in the field. I understand that I am to use the equipment supplied to me by my employer. I further understand that this equipment is provided solely for my benefit with the intent to minimize my exposure to potentially hazardous conditions. In the event of such usage, I agree to indemnify and hold harmless Tetra Tech and all of its employees from and against any and all losses, demands, claims, liabilities, lawsuits, damages, costs, and expenses arising, in any way, from the use of the equipment.

Visitors will not receive a copy of the Health and Safety Plan but will be required to review it. It is required that visitors be escorted in the restricted access work zone. Visitors must comply with the Tetra Tech escort directions while on-Site at all times. Non-compliance with escort directions will not be tolerated, and violators will be requested to leave the Site immediately.

Thank you for your cooperation.

_____ _____

Signature Date

Note: This original signed agreement is to be placed in the referenced project file.

APPENDIX B

HEALTH AND SAFETY ORIENTATION
MEETING ATTENDANCE ROSTER

HEALTH AND SAFETY ORIENTATION MEETING
ATTENDANCE ROSTER

Tetra Tech, Inc.

The following personnel involved in the field activities have attended a Health and Safety Plan orientation meeting.

By initialing this form, each person acknowledges that he/she has read and understands the indicated, numbered copy of the Health and Safety Plan.

NAME	COMPANY	DATE	ATTENDEES' INITIALS

Meeting Date: _____

Meeting Leader: _____

Project Number: T24396.036A